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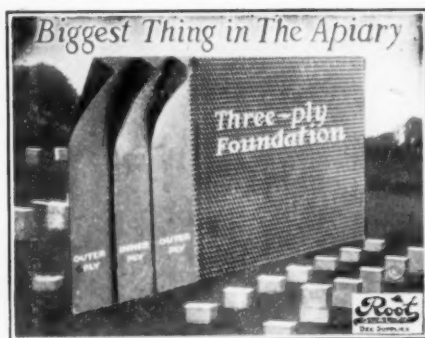
AMERICAN BEE JOURNAL

March

1946



CHARLES DADANT
1817-1902



WITHSTANDS HOT WEATHER

Non-Sagging Non-Stretching

Stretched cells reduce the brood area of combs

Drones eat up your profits

Stop this loss. For efficient, profitable combs use **THREE-PLY**

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COUNCIL BLUFFS, IOWA

HONEY SECTIONS

Because of the shortages in wooden ware we suggest the production of comb honey. Sections are plentiful and comb honey is not under a ceiling price.

Woodenware

Like every other bee supply dealer we are very short on hives, frames, covers, etc. When the lumber strikes are settled we will again have a full line of woodenware.

Foundation and Other Supplies

We have a complete stock of foundations, veils, smokers, gloves, hive tools, and other bee supplies.

August Lotz Company

**Manufacturers and Jobbers
of Bee Supplies**

BOYD, WISCONSIN

Genuine Italian Package Bees and Queens

We are fully prepared to handle your orders satisfactorily. Place your order now, be assured of your bees in the spring when wanted. Time is limited!

We assure you good weight packages, three banded Italian Queens and guarantee safe delivery on all package bees and queens. Get your order in the mail today.

PRICE LIST 1946

Quantity	1 to 24	25 to 49	50 to 99	100 up
2-lb. package with queen	\$4.15	\$4.05	\$4.00	\$3.70
3-lb. package with queen	5.15	5.05	5.00	4.70
4-lb. package with queen	6.15	6.05	6.00	5.70
5-lb. package with queen	7.15	7.05	7.00	6.70
Tested Queens	2.10	2.05	2.00	1.75
Untested Queens	1.35	1.30	1.25	1.15

Queenless packages, deduct \$1.10 per package.
Package Bees F. O. B. Queens Postpaid.

Tanquary Honey Farms, Inc.

Lena, South Carolina

**Extra
Care**

**Fast
Service**



**High
Producers**

**Prolific-
Gentle**

Our stock has been chosen for prolificness, high production, gentleness, and appearance. There are four express and mail trains daily to give you fast service.

For extra safety in shipping, we use cages with more screen wire; we provide more syrup to guard against any possible delays; we take every precaution to make sure that your bees reach you in perfect condition. 1946 PRICES:

Lot	Queens	2-Lbs.	3-Lbs.	4-Lbs.	5-Lbs.
1- 5	\$1.35	\$4.25	\$5.25	\$6.25	\$7.25
5-15	1.30	4.15	5.15	6.15	7.15
15-25	1.20	4.00	5.00	6.00	7.00
25 up	1.15	3.90	4.90	5.90	6.90

Above package prices include queen. Queenless packages, subtract \$1.15 from price of package with queen. All queens airmail, postpaid, but package bees are F. O. B. shipping point and are Express collect.

It is preferable to ship package bees by Railway Express, however, they can be mailed and in that event, customer should include postage.

Terms: Small orders, cash in full. Large orders, 20 per cent deposit, balance to be received two weeks before shipping date. U. S. funds.

A ten per cent discount is allowed if shipment is to be made after June 1st.

The Daniels Apiaries : Picayune, Miss.

10,000 PACKAGES ITALIAN BEES WITH QUEENS

5,000 EXTRA QUEENS

**OFFERED DURING
APRIL AND MAY**

3 Lb. Packages with Queens \$5.00

2 Lb. Packages with Queens 4.00

Extra Queens 1.25

**BY
EXPRESS**

WE SERVE TO SERVE AGAIN

SUNNY SOUTH APIARIES

MARKSVILLE, LA.

I. CLARK, Prop.

Northern California Package Bees—Queens

ITALIANS ONLY

2-lb. package with queen \$4.00
3-lb. package with queen 5.00
Queens, each \$1.25
Add 25c per package for orders less than 25 packages.

HOMER E. PARK

PALO CEDRO, Shasta County, CALIF.

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Manufacturers

Jobbers

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The Southern beekeepers' own magazine, but read by studious honey producers everywhere. With the American Bee Journal makes a combination that covers the beekeeping field.

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MEDINA, OHIO

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The Leading Bee Journal of the Southern Hemisphere is the

AUSTRALASIAN BEEKEEPER

Subscription 5 shillings per year, start any time. Enquire for International money order for 5 shillings (Australian) at your Post Office. Write now to The Editor, P. O. Box 20, West Maitland, New South Wales, Australia.

3-Banded Italian Bees & Queens

	2-Lb.	3-Lb.
1-24	\$4.00	\$5.00
25-99	3.75	4.75
100 and over	3.50	4.50
Queens	1.10	

J. P. CORONA

BOX 124

KENNER, LA.

Italian Bees and Queens

Prices to June 1

	2-Lb.	3-Lb.	4-Lb.
1-24	\$1.25	\$4.00	\$5.10
25-99	1.15	3.75	4.80
100 up	1.05	3.50	4.50

SHIPPING POINT, EPES, ALA.

LITTLE BROS.

SUMTERVILLE, ALA.

American Bee Journal Classified Ads
Bring Satisfactory Results.

American Bee Journal

HAMILTON, ILLINOIS

March, 1946

Volume LXXXVI, No. 3

Managing Editor—G. H. Cale.

Associate Editors—M. G. Dadant, Frank C. Pellett, J. C. Dadant, Roy A. Grout

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Package Bees and Queens

Place your order now for May delivery. We are booked to capacity for the month of April. Prices as follows:

Quantity	1-23	24-98	99 Up
2-LB. PACKAGE WITH QUEEN	\$3.85	\$3.70	\$3.50
3-LB. PACKAGE WITH QUEEN	4.85	4.70	4.50
QUEENS ONLY	1.25	1.20	1.15

(For Queenless Packages, Deduct Prices of Queen)

TERMS—Cash with order. Please order packages in multiples of three.

Queens

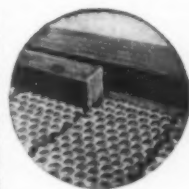
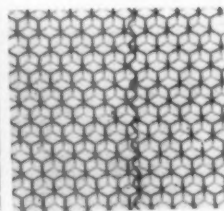
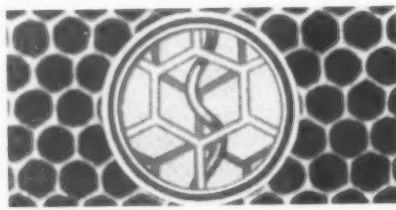
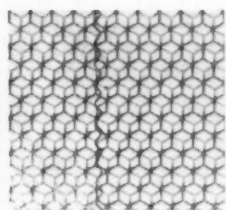
Dependable 3-Banded Italians, after May 25, 1946 through September

1-11, \$1.00 each; 12-99 \$.90 each; 100 or more \$.80 each

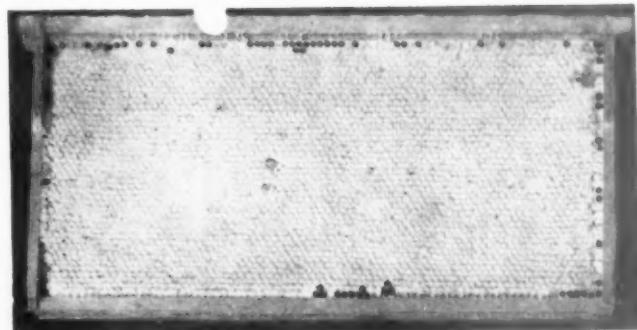
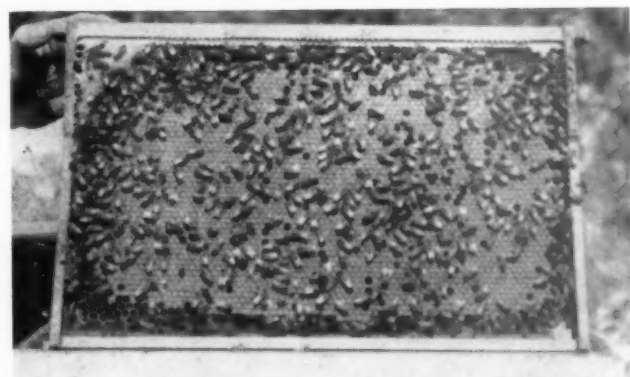
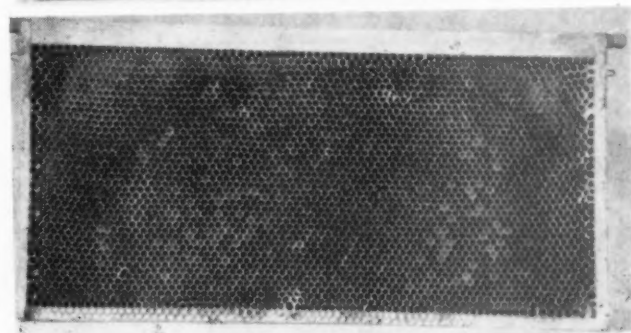
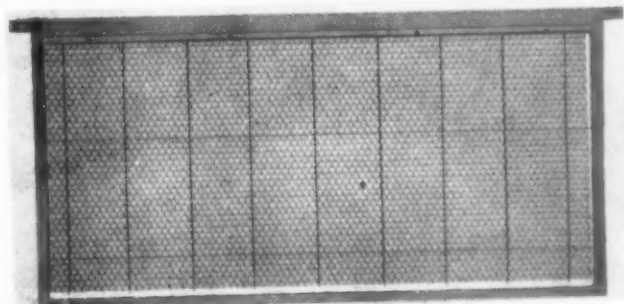
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DADANT'S Crimp-Wired Foundation



— A PENNY SAVED IS A PENNY EARNED —



Each sheet of Dadant's Crimp-wired Foundation in your Lewis Slotted Bottombar Frame starts at once to save pennies and this saving goes steadily on, year after year, in many little ways, that in total may not only return your original investment but even make you money.

The drawn combs completely fill each frame, with no waste space and with all worker cells, so the queen can lay all through each comb. She is never delayed in her laying for a minute and so can exert her full power in producing brood areas that will result in reduced swarming and greater population.

Turn your beeswax into Dadant's Famous Foundations—Crimp-wired, Plain or Surplus

Often more than a package of bees comes from a single brood comb, repeated with every cycle of eggs. What colonies you get! And these bees, largely about the same age, just cover a field of clover, making the scale hive bear down as you have never seen it bear before.

In the supers too you make your profit out of these fine combs. Each comb is solidly filled with honey, with even cappings, ready to swing into with the uncapping knife, in one quick stroke, each side is ready for the extractor. So it goes, saving time—making honey—with life-time combs.

Dadant & Sons, Hamilton, Ill.

Take it from me--

A good motto for today is "Keep facing it." The problems and reconversion pains facing business and industry today are many and complex. They won't be solved if we bury our heads in the sand. Neither will they be solved by the old tramp's philosophy of "turning your back to the wind." Instead we need the bulldog determination most aptly expressed by Capt. MacWhit who in the midst of a great storm said: "Keep facing it! They may say what they like, the heaviest seas run with the wind. Always facing it. That's the way to get through."

Glenn H. Hill, A-B-J Printer

BETTER BRED QUEENS THREE - BANDED ITALIANS

Have a number of open dates for shipment April 1st to 10th, also May 15th to 30th. Let us book your order now.

	Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1-24	\$1.25	\$4.00	\$5.10	\$6.20	\$7.30
25-99	1.15	3.75	4.80	5.85	6.90

CALVERT APIARIES
Calvert, Alabama

PACKAGE BEES

Quality Italian Bees and Queens

We still have some good shipping dates for the coming season

PRICES F. O. B. TIFTON

	1-23	24-98	99 and over
2-lb. pkg. with queen	\$3.85	\$3.70	\$3.50
3-lb. pkg. with queen	4.85	4.70	4.50

Queenless packages are less.

One dollar per package reserves the date, the remainder due at least 10 days prior to the shipping date.

GIRARDEAU APIARIES

(SUCCESSORS TO MORLEY PETTIT)

TIFTON, GEORGIA

Help For You

is available in daughter queens of "DR" stock which has been improved yearly by scientific selection. It will aid you in your fight against American foul-brood. The performance of this stock is why beekeepers are placing repeat orders. Satisfaction is what you get with the use of this stock. No other stock can offer the quality of parentage, of rearing methods and of testing service. So why not get those queens which give you the greatest value.

Write for shipping dates.

No change in prices for this season.

Iowa Beekeepers Association
STATE HOUSE DES MOINES 19, IOWA

Honey and Beeswax Wanted

We are ALWAYS in the market,
paying best market prices.

Send for our 1946 price list on
bee supplies.

Doing business since 1858.

The Fred W. Muth Company

229 WALNUT ST.

CINCINNATI 2, OHIO

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When You Want
QUALITY at LOW COST
Look For This Sign



KELLEY—"THE BEE MAN"

2-lb. pkgs. with queen
3-lb. pkgs. with queen
Young laying queens

WALTER T. KELLEY CO. : Paducah, Kentucky

BEES

We offer 3-banded Italian bees for express
shipment from our Louisiana bee farm.

Open dates available after May 1st.

	1 to 24	25 to 99	100 and up
2-lb. pkgs. with queen	\$3.75	\$3.60	\$3.50
3-lb. pkgs. with queen	4.75	4.60	4.50
Young laying queens	1.10;	25 and up	\$1 ea

No Change in Prices For 1946

We are booked to capacity for all April shipping dates. Can accept orders for May shipping only. First come—first served.

All orders for more than two packages SHOULD BE FOR MULTIPLES OF THREE, to make even crates. FOUR LB. PACKAGES and SPECIAL LOOSE-QUEEN PACKAGES cannot be shipped earlier than MAY 15TH. All orders should be accompanied by payment of \$1.00 PER PACKAGE, to confirm and hold shipping date, balance payable before shipping.

PRICES—Quantity Scale: 1-2 3-24 27-99 102-up
2-lb. pkg. with queen, each \$3.90 \$3.65 \$3.50 \$3.35
3-lb. pkg. with queen, each 4.90 4.65 4.50 4.35
Extra queens, untested, \$1.00, any quantity—Tested, \$2.00, any quantity.
For queenless packages deduct \$1.00—For special loose-queen packages, add \$1.00.

THE PUETT COMPANY
HAHIRA, GEORGIA

Gooch's Best Bees and Queens

With more than 2000 colonies to draw from
WE HAVE PLENTY SHIPPING DATES OPEN FOR APRIL AND MAY
Bright Yellow and Three-Banded Italians. Both are gentle, prolific and good honey gatherers. We do not breed from any queen who does not produce as much as 300 lbs. surplus honey. We guarantee to ship bees within 5 days of time agreed upon. Write for prices on large quantities. 5% discount to veterans.

Queens \$1.25 2-Lb. Bees and Queen \$3.90 3-Lb. Bees and Queen \$4.90

JESSE E. GOOCH & SONS, R. F. D. 3, Pine Bluff, Ark.

You Must Be Satisfied!

Quality and Production-bred Italian Queens

We have no shipping dates open for April except for a few very small orders. May shipping dates are going fast.

1-24 ----- \$1.10
25-up ----- 1.00

HEART O' TEXAS APIARIES : Waco, Texas

"Honey Girl" Italian Package Bees

Package 1 to 4 5 or more
2-lb. bees with queen, each ----- \$4.25 \$4.00
3-lb. bees with queen, each ----- 5.25 5.00

ST. ROMAIN'S "Honey Girl" APIARIES
MOREAUVILLE, LA.

DIXIELAND'S

Leather Colored Italians
Package Bees and Queens
FOR MAY AND JUNE DELIVERY
Unable to supply until May 20th

	Queens	2-Lb. Pkg.	3-Lb. Pkg.	4-Lb. Pkg.
1-24	\$1.25	\$4.00	\$5.10	\$6.20
25-99	1.15	3.75	4.80	5.85
100-up	1.05	3.50	4.50	5.50

PRICES AFTER JUNE 1ST

	Queens	2-Lb. Pkg.	3-Lb. Pkg.	4-Lb. Pkg.
1-24	\$1.10	\$3.85	\$4.95	\$6.05
25-99	1.00	3.60	4.65	5.70
100-up	.90	3.35	4.35	5.35

Dixieland's Apiaries : Greenville, Ala.



The heart of comb honey is foundation. The biting quality of the honey, that delicate center taste is foundation. It must literally become a part of the honey, so tender, a touch of the tongue will crumble it; yet be so strong that bees work it out quickly and easily. Dadant's Surplus Foundation, fragrant and pure, thin and sweet, blends so naturally with your finest comb honey, that your market grades are better and your sales are quicker.

Dadant & Sons

KOEHNEN'S
Package Bees and Queens
For Quality and Service
KOEHNEN'S APIARIES
GLENN, CALIFORNIA

MAGIC ELECTRIC WELDER
110 volt AC-DC; welds, brases, solders, cuts all metals; easy to use; full directions. Complete with power unit, flame and metallic arc attachments, carbons, fluxes, rods, mask. Used by the navy. Guaranteed for one year. Splendid for farm use. Only \$19.95.
MAGIC WELDER MFG. CO.
241 CA Canal St. New York City

ITALIAN BEES

Package Bees with Queens. 2-lb. pkg. with queen \$3.50; 3-lb. pkg. with queen \$4.50; 4-lb. pkg. with queen \$5.50. Satisfaction guaranteed. 20% down to book the order.

BUNKIE BEE FARM

R. F. D. No. 2, Box 85, Bunkie, Louisiana

CANADIAN BEE JOURNAL

Canadian beekeepers have much in common with their neighbors in the U. S. If you are interested in bee activities "North of the Border," send us your subscription NOW. We will see that you receive each monthly copy regularly.

Subscription price, \$1.25 per year in U. S. A.

CANADIAN BEE JOURNAL
OSHAWA, ONTARIO

The Truth About 1946

WOOD BEE SUPPLIES

If you are planning to make increase in 1946 make sure you can get your wooden goods before you go ahead. A very bad situation exists right now, in that the factories cannot get lumber enough to operate all machines much of the time.

Suitable lumber for bee supplies, within costs that can be cut profitably under present OPA ceilings on bee supplies, comes only from the northwestern states. For some weeks those mills have been shut down by a strike and this strike continues as we go to press. This has cut off lumber supplies, and until it is settled and the mills again resume operation, little lumber will be available.

Since the sale of bee supplies comes largely in spring, bee supply factories have always had to run 12 months in the year and fill their warehouses to supply adequately during this short shipping season. This we have not been able to do all fall and cannot do until lumber again becomes fully available. It is a situation over which we have no control but which we hope will better early in 1946.

In any event supplies made of wood will be scarce in 1946, as it will be impossible to take care of all who need goods, since we have already missed too much of our manufacturing time. However, we will do the best we can. Watch this space for information about wood supplies when we can again get ample lumber.

G. B. LEWIS COMPANY

WATERTOWN, WISCONSIN

Box 825, Albany, 1, N. Y.; Box 683, Lynchburg, Va.;
214 Pearl St., Sioux City, 14, Iowa



Here is that balance von Trebra asks for—Meadow of legumes—pasture—water retention. No erosion here.

Soil Conservation and the Honeybee

By R. L. von Trebra, Regional Chief of Operations,
Soil Conservation Service, Milwaukee, Wis.

THE depression of the 30's, followed by the second greatest war in history, is making people think more about our resources and where we are headed. Civilizations have risen and fallen—and when we examine the remnants of past civilizations we find they lasted only so long as they could exploit the land. It is a fact that as a result of human mismanagement, the soils upon which man has tried to build civilization are disappearing—either washed away by water or blown away by wind.

General Jan Smuts says, "Erosion is the biggest problem confronting the country, bigger than politics." Right here in the United States, the country faces a critical housing shortage. Why? Perhaps it's political—perhaps it's something else. But one thing is certain—we don't have the millions of acres of vast forests we once had from which to cut timber to process into homes. Furthermore, some of this land won't produce timber now—it is sterile, barren waste, covered with gullies, and incapable of supporting human beings, useful plants, or animal life.

When soils deteriorate, empires and civilizations decay and face ruin, starvation, and disease. In the United States we have thousands of reservoirs and hydro-electric projects. Many of them are silting up at an annual rate of 1 to 5 per cent of capacity. As soils become less productive, erosion is speeded up, runoff is greater, flood crests go higher. Land abuse and misuse results in a vicious cycle.

The decline of the Roman Empire, the Holy Land, North Africa, and even parts of the United States, present stories of deforestation, soil exhaustion and erosion. Where erosion has occurred, rain is no longer an unmixed blessing. In many of these devastated areas, drought has come to stay regardless of the weather. Misapplied science has brought to some of the world's richest agricultural areas a devastation far worse than all the ravages of wars in history. Empty stomachs have been a major factor in instigating every war that has been fought. More history is wrapped around the alimentary canal than most people realize.

There are about 3,000 counties in

the United States. About one half of the 3,000 counties have organized soil conservation districts. These soil conservation districts are organized by the local people and are administered by them for the purpose of developing better land use and conservation programs on the millions of farms in these districts. The United States at last has started on a program to conserve its land, in order to safeguard its tax base and future heritage, and to assure its future well-being.

I'd like to tell you something of what is happening in one of these counties that has organized itself into a soil conservation district. Similar stories can be told of hundreds of other counties.

The Board of Commissioners of the Woodbury County Soil Conservation District in Iowa, assisted by Soil Conservation Service personnel, local farmers, and the Extension Service, have made an inventory of the conservation job to be done in their district. There is not time to give you the entire story, but it runs about as follows:

There are 554,000 acres in the county. There are 13,968 acres of

permanent pasture needing renovation and reseeded that will require 215,000 pounds of grass and legume seed. Steep, eroded cultivated land, totaling 40,978 acres, needs to be converted to permanent pasture, and this will require 625,000 pounds of grass and legume seed. In order to maintain good cropland production and to control erosion, Woodbury County will need 2,000,000 pounds of grass and legume seed annually to do the seeding required. These are the figures for only one county—not for the entire state of Iowa.

How are we going to do this conservation job? How are we going to get the production of grasses and legumes we need, to get the seedings made which will protect the land, provide a balanced agriculture, and maintain our heritage for generations to come? Why are we so interested in such an enormous increase in the acreage of grasses and legumes? Run-

off from a cultivated prairie in a few years may increase from 1 or 2 per cent to 10 or 20 per cent.

To accomplish this conservation job, intensive programs of seed production will be needed. Bee culture and the production of necessary plant materials, particularly legumes for farm conservation programs, must be stepped up. Bees and heavy legume seed production are dependent on each other. We need better cross-pollination of legume seed crops than takes place under normal, everyday conditions. We need greater utilization of honey plants, especially legumes of high conservation and forage value, in the conservation program.

About the only way to maintain productive soil is to grow grasses and legumes to hold the soil in place, maintain the organic matter, and increase the water absorbing capacity of the soil. As soils become more eroded and less productive, the grow-

ing of grasses and legumes becomes more difficult.

We are told that 18,000 gallons of water are needed to make one ton of iron ingots, and that 65,000 gallons of water are needed to make one ton of iron into steel. For every gallon of gasoline that we get at the filling station, it takes about 25 gallons of water to manufacture it. To produce a pound of rayon requires 75 gallons of water.

Most of us like beefsteak. But it takes 3,700 gallons of water to produce a pound of beef before we can eat that steak. It takes close to 37 gallons of water to produce one slice of bread. It requires about 14 gallons of water to produce an average helping of potatoes.

These figures show that water, honey bees, grass, legumes, trees, and soil are vital links in the list of resources that are essential to our existence.

Charles Dadant--1817-1902

By Kent Pellett

THE founder of the firm of Dadant and Sons made a success as a beekeeper in later life only after he had first failed as drygoods merchant, tanner and vintner.

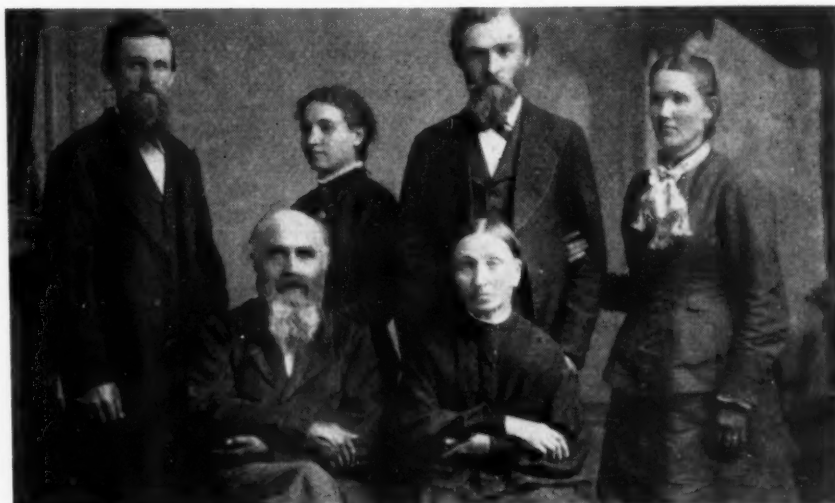
Charles Dadant was one of the merchants of Langres, France, whose business was wiped out by the depression that followed the revolution of 1848. So, in 1863, he took his wife and family to a brush farm near Hamilton, Illinois, and started over.

He pointed to two boxes of black bees he had acquired, telling his wife, "These will provide our living!"

Already he had begun to read American newspapers with the help of a pocket dictionary and so he learned of the famous eleven ton honey crop produced by Moses Quinby of New York State.

Dadant tore the loft floor out of his log house to provide the necessary lumber for additional hives, and paid five dollars for an Italian queen when he had scarcely enough money to buy flour for the family.

Reverses did not discourage him, and within twenty years he and his son Camille—the two were inseparable in the business—produced 47,000 pounds of honey in one year, one of the largest crops of honey up to that time. Reports of so great a crop caused considerable unbelief in



Bottom, Charles Dadant and his wife. Top, left, Emil Baxter, son-in-law; daughter Eugenie; son, C. P. Dadant, and son's wife.

Europe, where it was readily concluded that Americans were all braggarts.

The elder Dadants manufactured their first comb foundation under a tree in the backyard. The mill was operated like a hand wringer. Charles Dadant melted the wax in his wife's wash boiler, which as a result was usually gummed up on wash day.

They sold 500 pounds of foundation the first year. Six years later the sale was 47,000 pounds. Thus was founded a business that was to remain

in one family for at least four generations.

* * * * *

Charles Dadant was a careful observer and an acute student of bee behavior. He was known to stand outdoors watching his observation hive all of a bitter afternoon.

As he had learned to read and write English well, he was able to set forth his conclusions aggressively in both French and American publications.

(Please turn to page 105)

Importance of Pollen, Pollen Supplements or Substitutes in Spring Development of Colonies

By R. E. Newell

RECENT experimental work has shown conclusively that pollen is of vital importance in the diet of the honeybee, and especially so in the raising of brood. Colonies located near an unfailing source of natural pollen in early spring may not require supplements or substitutes to develop normally. Where only a normal development is desired little attention need be given to feeding a substitute, but where it is desired to increase the number of colonies to make up winter losses or build up new apiaries, some thought should be given, and a trial made of the new formulas.

Apparently many beekeepers still consider recent feeding experiments to be a fad. Beekeeping is a science, not an exact science but a natural science, and we must expect to change our methods to meet changing conditions. The old writers on bees often stressed the importance of pollen but did not have any suitable substitutes, or means of obtaining a quantity of natural pollen to make suitable trials. Mr. J. D. Bixby, Sr., Corona, California in *Gleanings In Bee Culture*, December 1923 had the following to say regarding the importance of pollen. "Pollen is indispensable to brood rearing; when the proper season approaches, try to induce the bees to accept substitutes such as rye flour, or barley flour. I have always failed here, possibly because a few loads of natural pollen are obtainable any clear day. I am inclined to think that lack of pollen to prepare a "balanced ration" is the main cause of spring dwindling."

Yes, the old-time beekeeper saw a need for a substitute several hundred years ago, even before the invention of the movable frame hive. Bees show the need of pollen by their gathering of grain from animal feeding pens, grist mills, etc. Bees make a nuisance in their search for something to take the place of pollen when it is not available. No flour or other

substance previously tried contained the quantity of protein contained in soy bean meal flour, and therefore where there might have been some gain from the use of rye, barley and other flours, the protein content was not sufficient to give the results obtained today. We all know that bees will do best on pollen, but because of the uncertainty of an available supply of this natural product due to early killing frosts, cold, rainy flight weather and other factors beyond our control, a substitute may be necessary.

If the bees have several frames of pollen in the hives, or a sufficient supply to bridge them over the uncertain periods, feeding of a substitute or supplement may not be required, but may be of some benefit in starting them off to heavy brood rearing. Colonies of medium strength, or colonies made up late in the season show the greatest need for pollen supplements or substitutes. The reason that colonies divided in late August and September fail to winter successfully is largely due to the fact that the bees do not have sufficient pollen to build up two winter clusters, and have any pollen left to rear brood during late winter and early spring.

Package colonies hived a week or two before pollen is available may make out satisfactorily as it is possible for young bees properly fed in the south to draw substances from their own bodies to start feeding the young larvae. If the natural supply of pollen from the field should fail for some reason, such package colonies wear themselves to old age very rapidly and do not build up successfully. Therefore if package bees must be hived early, frames of pollen or substitutes are required to make them successful. Colonies hived at the beginning of the natural pollen period will forge ahead of the packages hived too early without provisions for the pollen. In this area packages hived

the 10th of April in a normal season when natural pollen is available build up rapidly. If the weather is unfavorable for pollen, the 20th of April is the best time to have them arrive, and some seasons May 1 is early enough to have them. Every day counts during the build-up period. Colonies hived after the 10th of May rarely build up to storing strength for the honeyflow without brood from overwintered colonies.

Therefore, the successful beekeeper should try out the feeding of pollen substitutes or supplements for his package bees, even though it may not be thought necessary for the established colonies. If frames of pollen are taken from established colonies that may appear to have more than sufficient for their own needs, he may be building up his package bees at the expense of his old colonies. Keen observation is necessary if a beekeeper is to handle the individual colony properly. A beekeeper accustomed to working through colonies of bees must be aware of its requirements at the particular time the frames are being examined. It may be to your advantage to consider the question of pollen.

Massachusetts.

More Bees For Seed

In the "Farm Journal," January, Page 21, "We've Got to Have More Bees," by John R. Rohlf, gives startling figures about the loss in legume seeds and advises farmers what they can do to improve their situation under four points:

1. Buy bees and take care of them.
2. Rent colonies from a beekeeper.
3. Use package bees.
4. Offer the beekeeper locations on the farm.

This ought to catch the eye of many farmers, since the "Farm Journal" reaches a multitude.



S. A. Pauli, Pueblo, Colorado, catches a valiant "apple grower" at work.

Busy Bee Improves Each Shining Hour

WE have not yet found the perfect answer to the problem of pollination. The bee confines her attention to a small area of flowers, roughly circular in shape and a few yards in diameter, for many days or weeks, never visiting flowers elsewhere. Thus, she might confine her work to one tree, and if there is not sufficient competition she will not go elsewhere. If bees of another colony come in they find an area not yet covered by bees already there. Thus there is always a wandering population and the cross pollination is done by them. There must be a high degree of competition. There must be an excess of bees. Bees do better in larger groups.

E. L. Sechrist, California.



(Top) New red and gold hybrid marigold from little French (lower left), and big African (lower right); by Burpee. Hybridization by bees.



And blueberries too. New Jersey growers beg bees for this fruit, also for cranberries.

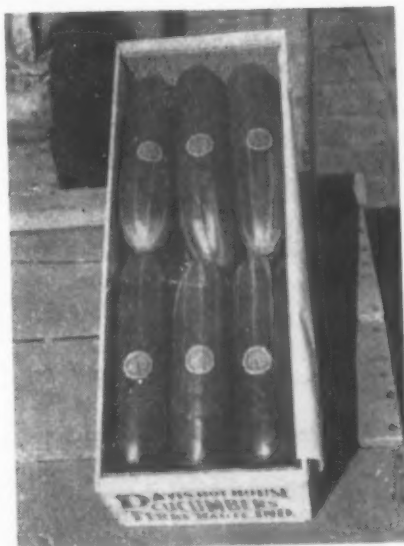
(Center picture). Paul Hadley, Piggott, Arkansas, caught peach bloom wide open. What a haven for bees. And what peaches for the grower!



Every beekeeper knows that his bees, gathering from the clovers, make him money; and the farmer knows they give him top clover seed, of best quality. Now, with world legume seed at an all-time low, bees are more needed than ever.

THERE is no doubt that pollination is the foundation of beekeeping. How many know that the primary work of bees is pollination and honey is a by-product? Concentration of crops calls for more insects than nature provides and so the beekeeper must supply "concentration" for pollination. We lack scientific data on the whole subject. Until we find out exactly what the conditions are for both the grower and the beekeeper we will not make a substantial contribution to the need of pollination.

Reginald Gamble,
England.



The buckwheat grower often plants so many acres that long, eye-slanting vistas of pink and white bloom almost go from sight. How can the bees nature distributes do justice to such a gorgeous job of pollination?



Cucumbers! And such cucumbers! Made by bees, under glass for the Davis Greenhouse, Terre Haute, Indiana.



Pictures from Dr. Farrar, Wisconsin. A supply of pollen supplement being given to a colony.



Covered and pressed down well over the combs, the supplement will be readily taken by the bees.

How to Use Sulfa in the Prevention of Bee Disease

By G. H. Cale

SINCE the publication of the results in Missouri (Controlling American Foulbrood with Sulfa Drugs, University of Missouri, Bulletin No. 482) there has been a flood of excitement just as there was in the California gold field. However, unlike past experience, when something was offered to wipe out bee disease, there has been no flashing of banner or waving of flags, or tooting of horns, with the general idea that American foulbrood is at last conquered!

And the scientists are agog how to explain the effects of the sulfa drug on bee disease. They say that it does not kill the germ of the disease when the germ is by itself in a laboratory medium. However, feeding sulfa in the beehive does have an effect on American foulbrood. Whether or not it has any effect on other bee disease is not known.

The Missouri experimenters claim that sulfa removes Nosema from the intestinal tract of the adult bee. Others say it does not do so. Far be it from us to try to settle the controversy. From practical observation, however, it is quite certain that the adult bees brighten up, work faster and live longer after sulfa is fed. Whether or not this conditions them so they make more honey or whether it conditions them so they are responsible for the removal of diseased

larvae as fast as they develop, we are unable to say. There is no proof one way or the other.

Far and wide it is acclaimed by those who have tried sulfa drugs that the effect on colonies is to cause American foulbrood to disappear as far as the eye can see. Skeptics say that it has only gone into hiding. When the effects of the sulfa wear off it will come back worse than ever. This cannot be entirely denied as there are frequent cases of recurrence after treatment when sufficient time has elapsed. On the other hand there are many cases of cure which seem permanent, even after several seasons.

As far as the use of sulfa is concerned in relation to the inspection laws, the position held by Minnesota is probably the one which would be correct in any state. Under the law, to protect us from the spread of bee disease, if an inspector finds disease it must be destroyed. In some cases it is left to the beekeeper to do so if he will; if not the inspector does it for him. Harboring disease, however, which is the state of affairs when a beekeeper attempts to feed sulfa to eliminate it, cannot legally be tolerated in many states.

With ordinary good management it is possible to reduce disease to as low as one to three per cent; even less. We used to have apiaries in southwest

Iowa. Four inspectors in the fall previous to our leaving Iowa, for other locations, rolled up their sleeves, and examined every colony. They found three cases of disease in 1500 colonies. There would be little sense in trying to cure them by any method. The number is too small and the risk too great. If the beekeeper has a large amount of disease it is probably due to his own carelessness and it is quite likely that the use of sulfa would not permanently remove disease from his apiary but would only open another avenue for its perpetuation, by allowing him to continue to be careless.

We have also found, and many others have, that by the use of a good honey-producing strain of resistant bees it is possible to increase the crop, reduce the operation cost and have very little disease. In this case also the treatment of a few cases would not be profitable management.

I presume now you are asking, "Why use sulfa at all?" As a preventive.

There is no evidence that in the recommended amounts it injures the bees or the brood. We have fed it as a preventive in yards where other years the incidence of disease was above the average, without a single case occurring. Other beekeepers who have been bothered with disease in the past,

even though they were careful, conscientious people, after feeding sulfa find they have no disease. So it emerges paramount at this point as a preventive.

The question has been raised about the amount of sulfa which might be found present in honey produced over colonies to which sulfa is fed. It is reported that an examination made by the Food and Drug Administration of samples submitted by Dr. Haseman of the University of Missouri, showed not a trace of sulfa although the test is extremely sensitive. This should answer the question. There is little likelihood that sulfa would get into honey to be consumed in any appreciable amounts and as one doctor said, "If it should I am going to buy that honey for all my patients."

Now for the kind of sulfa to use. Many different sorts have been tried, sulfathiazole, sulfadiazine, sulfaguanadine, and others. There are quite a few sulfa derivatives, but the most readily available is sulfathiazole.

In the original experiment half-gram veterinary tablets, containing 7.5 grains of sulfathiazole, were used. They are satisfactory. They are not soluble and must be crushed up finely to add to feed. They do work and they are readily obtainable. A soluble form, known as sulfathiazole sodium, is available as a powder which is completely soluble in water. We have used cocothiazole, put out because it buries the taste of sulfa, making it

palatable. It tastes like the chocolate covering for ice cream sundaes. In fact it is quite a temptation to keep dabbing the finger into it and eating a little. Any of these forms are satisfactory.

From various experiences in our own practice we have settled down to the use of three half-gram sulfathiazole tablets or the equivalent to each gallon of syrup, whether the syrup is mixed with a pollen substitute or supplement or whether it is used in feeding bees. A heaping teaspoonful of cocothiazole or a level teaspoonful of sulfathiazole sodium are equal to three half-gram veterinary tablets.

In making pollen supplement or pollen substitute we use syrup made of half sugar and half water. In feeding syrup directly to the bees, a thin syrup may be used, one part sugar to four parts water as a carrier for the sulfa; or if the feed is needed to replenish the stores of the colony use a half and half syrup.

When feeding syrup, three gallons per colony is what we recommend as a preventive. When feeding pollen substitute or pollen supplement, the purpose of course is to replenish the stores of pollen and incidentally carry the sulfa. If there is an abundance of pollen this feeding is not necessary. Usually, in outyards, we feed about two pounds of substitute or supplement beginning the first of March, feeding every ten days until natural

pollen is abundantly available.

The following are satisfactory formulas:

Pollen Supplement

The pollen must be trapped the previous season and stored over winter to be available in the spring. Four pounds of dry pollen, softened with two and one-half cups of water, are added to thirty pounds of syrup, made by dissolving twenty pounds of sugar in ten pounds of hot water. To this mixture, twelve pounds of expeller process soybean flour is added and the whole stirred until uniformly mixed to produce a doughlike paste. This amount will provide thirty-two cakes weighing about one and one-half pounds.

Pollen Substitute

(Adapted after the formula by Dr. Haydak, University of Minnesota.)

Three pounds animal type brewer's yeast, six pounds expeller process soybean flour, moistened with one to one syrup until of the right consistency.

Any amount of either the supplement or the substitute may be mixed so that there is sufficient for the feeding to be done. If there is material left over, store it in a cool, dry place. Do not mix too much beyond the amount required. Soybean flour will have to be stored away from weevils. Put the flour in a tight metal container, fumigate occasionally, if it is to be stored any length of time.

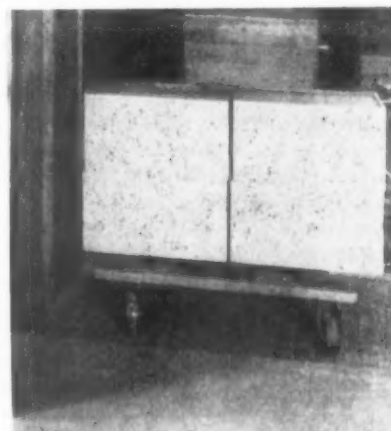
Supers of Honey in the Honey House

By Roy A. Grout

A necessity in keeping the honey house clean is the prevention of honey and bits of wax from accumulating on the floors and other surfaces. The use of hauling board or trays for handling supers are a great aid in making the extracting work easier and preventing honey from dripping on the floors.

The single hauling board is usually the size of the top of the hive body, often cleated all around with a one-half to one inch cleat and having two heavier cleats nailed lengthwise underneath. Often the top of the

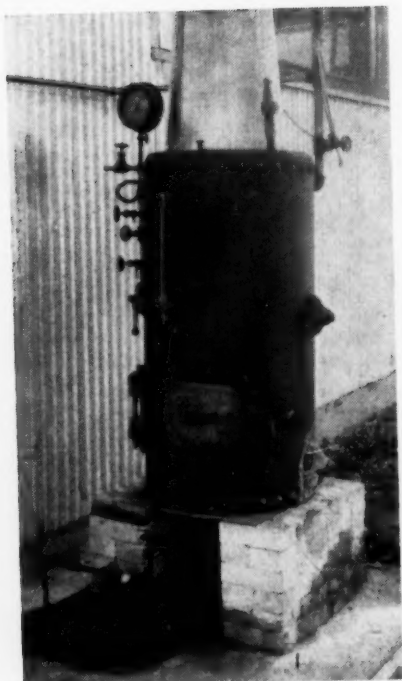
hauling board is lined with galvanized iron forming a tray that can be removed for washing and cleaning. These boards can be placed on the truck bed and the supers piled on them as they are removed from the colonies. When unloading at the honey house an ordinary warehouse truck with an extension on its front can be shoved under each stack of supers for wheeling to any part of the honey house. After extracting, the supers are placed on similar boards for further handling. These



Supers loaded on a dolly for transporting around the honey house to whatever place they are needed.

boards also can be used to cover stacks of supers.

Larger operators sometimes use the more expensive lift truck capable of handling skids or platforms holding two, four or six stacks of supers.



An oil-burning steam boiler. The whistle is a relic of the good old days.

Like the hauling board a skid can be covered with a galvanized iron tray to catch the dripping honey. Another departure from the single hauling board or tray is the dolly, a low platform holding one or more stacks of supers, supported by casters, which may be rolled about the honey house. The dolly works well on smooth floors but is not as good as the hauling board or skid for trucking from the yards.

Another departure from the dolly having three or four casters is the platform truck which has two wheels or large casters in the rear and a strong stationary support in front. A jack mounted on rollers is introduced under the front to raise it for moving about the honey house. Probably the most economical of these methods is the single hauling board, but the requirements of the beekeeper will dictate which is best for his use.

When none of these methods are advisable supers of honey should be set on clean paper in a wheelbarrow, a truck or the honey house. These papers can be gathered up and disposed of after use and will save much scrubbing and cleaning. A number of pans about two to four inches in depth and large enough to hold a stack of supers are desirable to have about the honey house. Sometimes accidents occur, a super is dropped or a stack of supers is upset, and more honey will drain from the damaged combs than ordinary boards or skids will contain. By taking the pre-



Flue-type boiler, usually with automatic water injector and fire control.

caution of placing the supers in the pans, much cleaning can be eliminated and the honey can be saved.

The beekeeper usually is able to extract the honey from the comb soon after the supers are brought into the honey house. Since most of this work is done in warm weather, a room for storing the supers for the purpose of warming the combs, or to prevent excess humidity from adding moisture to the honey in the combs is not needed. The average beekeeper likewise has comparatively few colonies and economy must dictate that the supers be placed in or near the extracting space and, in cool weather, when it is necessary to warm the honey in the combs, it is also necessary to heat the extracting space. But, in regions where the humidity is high or where honey is too thick or cold, a heated storage room for supers of honey is necessary.

The heated storage room should be large enough to accommodate as many supers as are brought in during several days' work. The supers are stacked criss-cross or alternately spaced in some way to permit the circulation of warm air through them. The temperature in the room should not exceed 100° F. and ample time be given to allow the combs to warm gradually. Higher temperatures will soften the wax in the combs and result in possible damage to them in the extractor. Some beekeepers put their steam plant in or near this room and use it as a source of heat.

An electric fan to circulate air in the room is recommended. Otherwise the combs in the top supers may become too warm while those near the floor are cool. Leaving the supers of honey in a warm room allows the bees that have been brought in with the supers to escape before the supers are taken into the extracting room.

When supers of comb are stored for more than two or three weeks before extracting them, it is necessary to fumigate to prevent damage by the larvae of the wax moth. Paradichlorobenzene (PDB) is not suitable because the honey in the combs will absorb the odor of the fumigant. Carbon disulfide can be used if in the total absence of any flame or open fire in the honey house since it is inflammable when mixed with the right proportion of air. Cyanide is not absorbed by the honey but its use in the honey house is not recommended. The gas given off by cyanide is extremely poisonous to people and animals and must not be breathed. If necessary to use cyanide the supers should be stacked tightly and covered tightly at the top. Arrangements should be made for the cyanide to be introduced at the bottom of the stack of supers and the room should be well ventilated during fumigation. Recently, methyl bromide has been recommended for control of bee moth, particularly in the fumigation of comb honey. It is claimed that it will not only kill the wax millers and worms, but the eggs as well. Like cyanide it gives off a gas deadly to humans and animals if breathed and every precaution should be exercised in its use.

(Editor's note—more information in regard to fumigation of combs will be given in a later article.)

Whenever practical, supers of honey from different plant sources should be kept separate and extracted at different times. It is extremely unwise to extract the dark-colored or strong-flavored honey along with a light-colored or mild-flavored honey which would result in a honey of lower quality commanding a lower price in a normal market. Sometimes the honeys are mixed in the supers and it is impossible to separate them. This may be due to the neglect of the beekeeper in not removing supers of one kind of honey and adding other supers of empty combs before another kind of nectar is gathered, but there are conditions when this is unavoidable.

The Steam Supply

For heating the comb storage room

as well as the uncapping equipment and the honey processing equipment later on, a source of steam supply is needed. If steam is required only for heating one or two uncapping knives or planes, the one-gallon or two-gallon copper steam generator, heated by a one burner oil stove or gas stove will be sufficient. But when steam is required for heating the honey or melting the cappings in addition to heating the uncapping equipment, a larger source of steam supply will be required. Most will find the eight-gallon steam generator large enough, but larger beekeepers will find a steam boiler necessary.

A boiler of about five horsepower capacity will supply steam for warming the combs, for heating the uncapping equipment, for heating honey, for melting the cappings, for rendering beeswax, and even for heating the honey house. Very large operators, to provide a more ample supply of steam, may find it advisable to install a boiler having a capacity of ten horsepower. While the boiler may be of the flue type, the flueless type is preferred since there are no flues to replace later at considerable bother and expense.

The steam gauge of the boiler and the water level glass should be placed

where the operator can see them at all times. Most steam boilers are hand fired, the only objection to this being the dirt and bother of taking care of them. It is advisable for the larger beekeeper to consider the use of a small, automatically controlled oil burner, which is cleaner and requires much less attention. In either method of firing the boiler, consideration should be given the type of boiler having an automatic steam control and an automatic water injector which maintains a proper water level in the boiler. This type of boiler is available in sizes of five horsepower and larger.

Charles Dadant 1817-1902

(Continued from page 98)

Bee magazines were battle grounds in those days following the Civil War when the most of beekeeping practice still had to be evolved. One burning question after another was debated, from the proper color of Italian queens to the adulteration of honey. Charles Dadant was a strong critic who attacked the errors of friend or enemy alike, so he found himself at the center of more than one bitter controversy.

Men who personally met this meticulously dressed man with gray silken beard and a little skull cap to cover his baldness were surprised to learn that he still spoke English somewhat brokenly, though his command of the written word was perfect.

Charles Dadant touched beekeeping at many points. He was one of the first successful importers of Italian queens from Europe. He and his son were among the first extracted honey producers. They made an extractor soon after its invention was announced in *American Bee Journal*. He was the first to offer honey in tin pails.

When the sales of extracted honey encouraged adulteration, he started agitation for legislative relief by Congress at a beekeepers' meeting at Burlington, Iowa. This led to the pure food law many years later. He was among the first to appreciate the value of sweet clover as a honey plant.

He upheld L. L. Langstroth in his battles to obtain legal recognition as inventor of the movable frame hive. This may have influenced Langstroth to ask him to revise the Langstroth



One of the Dadant apiaries along the bluffs of the Mississippi River. Old style Dadant hives.

book, "The Hive and the Honeybee," which remains one of the great bee books of all time.

* * * *

But he was best known for two different things in Europe and the United States. In Europe it was for successfully introducing movable frame beekeeping on the Continent over the most stubborn opposition of some leaders.

The editor of the leading French bee magazine called him "Barnum" and refused his contributions because of his stories of large honey yields with movable frame hives.

Gradually he was accepted, however, and was in later years called "Our Master" in the countries where his hive was adopted.

In the United States he was known as the original advocate of the large

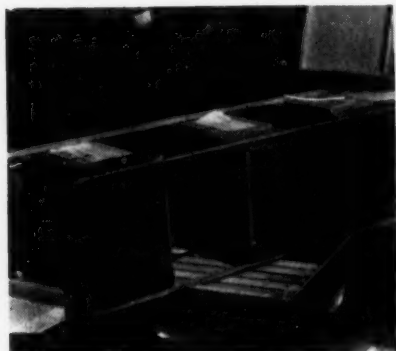
hive. He had experimented with hives of all sizes and descriptions to become convinced that only in large hives could the bees produce to capacity.

When the small hive craze swept the country in the eighties he refused to be impressed. He was quick to comment on the "empty-headedness" of those who advocated the system of contraction of the brood nest. For a number of years he was almost the only large hive champion who refused to be silenced.

After the small hive had had its day and the contraction theory was upset by the hard fact of diminishing returns, eventually large hives of the type advocated by Charles Dadant were placed on the market and quite generally accepted.

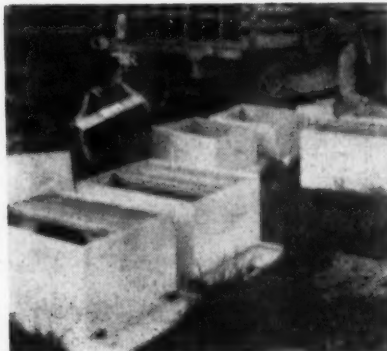
Even those who retained the small hives adopted his principle when they placed a second story on their hives.

How To Hive Package Bees



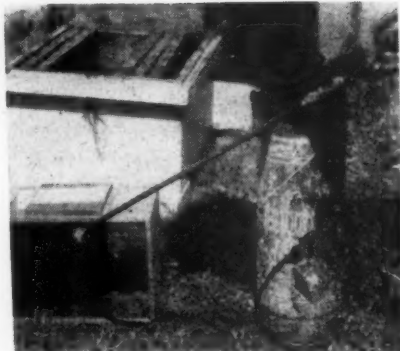
1

The bees arrive. Your express man should tell you they are ready. Sign express receipt to report any damage; or OK the shipment. Arriving at the bee yard the straps of two or three packages may be opened for distribution.



2

Put a package beside each hive, preferably where there is shade. Then the pails of feed may be set with the packages. Have everything ready to do the complete job without having to get anything else. Have the entrances of the hives reduced and the frames in position.



3

Now to quiet the bees. Use a good nap sack sprayer filled with warm water and spray the bees thoroughly. Notice that the frames in the hive are two on one side and three on the other. This will make it easy to do the work quickly. Take off the top wooden cover over the feed can.



4

Now the bees are wet, the cover is off, and everything is quickly available. Shake the bees down into the bottom of the cage. They are so damp that they will not fly or crawl to any extent. If packages are hivevd late in the afternoon, the bees will seldom be flying before morning and will be well organized.



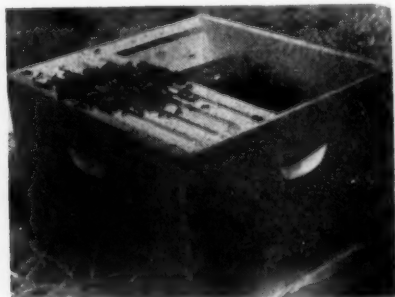
5

Take out the package feeder pail and remove the queen cage. Some queens are with attendants and candy; some in dry cages without attendants. When combs are used in the hives it makes little difference. We will release the queen. Remove the cover from the open end of the cage; place cage under the bottom bars, wire up.



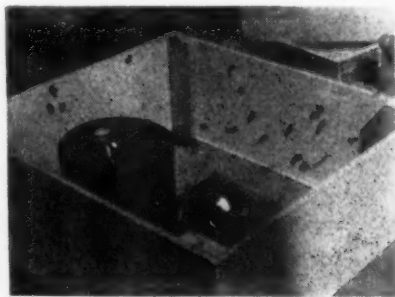
6

Dump enough bees in the hive with the queen to cover her cage; push combs together. Quite a few of the bees should be shaken out. Put strips down inside the empty space toward you on which to set the package cage. The cage can be removed later and combs added.



7

Now the cage is on the supporting strips, the bees are all through the combs and on the bottom board, entrances are closed, hive ready to be shut up and fed. The bees in the package will find their way out readily and soon.



8

Feed can in place. In this case, in warm weather, it is placed right over the frames or on the inner cover, with the hole open; or in the corner with the oilcloth turned back. A light surrounding feeder shell is used in our yard; the cover placed on top.



9

Notice the green grass pushed in top entrance. This grass dries and bees push it out and establish their flight. Leave package alone for ten days. If the queen is laying their only need is food and combs. Use pollen substitutes if necessary.

Two Queens in a Hive

By Henry Stewart

SEVERAL years ago there appeared an article in the bee magazines explaining the magic of a double-screened division board for running two queens in a hive, with the view of producing bumper strong colonies early for the production of comb honey. While I am not now producing comb honey, I can see its decided advantage for that purpose, but I have used the double screened division board with marked success in making increase and at the same time increasing production.

The division board screened on both sides is for horizontal division. In connection with this, I also use two vertical division boards and two hive bodies. These vertical boards are sawed boards to fit snugly in a hive like a brood frame. The screened division board has an opening, say 1x6 inches, cut preferably on one side and screened on both sides. A bee escape board with the escape removed and screened, or a bottom board (provided it is a fit board), makes a good one, and quite important is the screening of this board on both sides.

When the article referred to came out, I had not read it when a neighbor beekeeper asked me what I thought of it. I told him I was skeptical. It is possible to run two queens in a hive in a honeyflow, but to put in an extra queen before the honeyflow starts and have them live peacefully is another question, and it is very much of a

question with a single screen; but with a double screen it is different. The bees and queens are kept entirely apart, yet the scent and heat of the divisions are as of one cluster.

As early in April as the bees have sufficient strength and several frames containing brood, I order laying queens from the South and take from the colony a portion of the honey and brood, and rather more than half of the bees, and place in a new hive body. I then shove the remaining combs and old queen to one side of the hive and put in one of the vertical boards. I then put on the screened board, with the screen directly over the cluster. I introduce the new queen to the new division, put in a vertical division board and put it on top, and provide them with an entrance at the rear. I have now a cluster divided, but having the same heating space as before, but in a few days will have two queens doing business instead of one.

For increase with package bees, as early in April as I think the condition of the bees and the season will permit, I receive from the South three pound packages of bees with two queens caged in each package. With these I do practically the same as before, save that as the queens are practically introduced, I punch holes through the candy so the bees will soon liberate the queens.

I now take two hive bodies, place in the center of each a vertical division board and fill in one side of each with drawn combs and honey and insert in each a caged queen between the combs. I place one of these on a bottom board, on top the other so that one division is directly above the other. The next day if some equalizing of strength seems desirable, I do it and then leave them alone until they need room or other attention, when I remove the vertical boards, fill the hives with drawn combs or foundation and again leave them until they again want more room.

If at that time a honeyflow is on, these double colonies may be manipulated in accordance with the desire of the apiarist. If no increase is desired, simply remove the division board and the united colony, for some time, and possibly through the honeyflow, will continue to function with two queens. There will be no fighting or disturbance. If increase is desired, take a couple of frames of brood and one of the queens and set aside as a nucleus, and still have a super populous colony for the early honeyflow, or the two sections may be set side by side and develop into two strong colonies, not far inferior to what either would have been had the queen received the whole three pounds of bees.

—Illinois.

Afterthoughts About Nosema

By L. F. Childers

IN White's report on Nosema he found infected bees to have very little resistance and to be short lived. To prove that he confined over one thousand infected bees and at the same time ran a check of uninfected bees, and at the week's end 8% of the

uninfected bees, and 83% of the infected bees were dead. He also found that infected bees never recovered. In his experiments he artificially infected and killed thirteen colonies. Five of these queens were found to be infected. That was almost 39%. Now when we come to put these facts

together we have—weak resistance—short life—no recovery—and queen infection transmitted by infected attendants—all of which boils down to an early supersedure. And in recent years an ever increasing crescendo is rising about the higher percentage of supersedures. Looks like the sulfa treatment might mend a cog there doesn't it?

Now if infected attendants can transmit infection to the queen why can't infected nurse bees transmit infection to the developing brood? But White says "The brood is apparently uninfected" and bases his conclusion on the fact that emerging brood is never infected. His test proves that

statement to be correct. So the matter would seem to end there. But has White considered all of the possibilities? What makes patchy brood? Certainly nurse bees, suffering from toxic poisons due to infection, can't secrete perfect larval food. Then could it be that some of these larvae die leaving their cells open? Or could it be that a queen reared by infected

nurses falls a little short in viril eggs? These are intriguing questions that for the practical bee man really need to be solved. Late this summer I introduced twenty-five resistant queens in colonies known to be Nosema-free and a dozen or more of them filled their frames from edge to edge with brood. If they will gather honey in the same ratio they will be worth their

weight in gold. There is no doubt about the way Nosema-free colonies build up and they gather more honey for they have greater numbers with the physical strength to do it. I wonder if those high producing colonies reported in recent years were not Nosema-free.

Missouri.

The National Federation Serves the Veteran

WE are pleased to publish here the written report of the Veterans Rehabilitation Committee, National Federation of Beekeepers Associations, read by its chairman, Elmer Carroll, Lansing, Michigan, at the Indianapolis annual meeting last January.

"On April 21, 1945, President John W. Holzberlein appointed the Veterans Rehabilitation Committee composed of Elmer Carroll, Lansing, Michigan; H. J. Rahmlow, Madison, Wisconsin; and J. F. Reinhardt, Tifton, Georgia.

"On April 23, our committee started a survey to discover all angles of possible aid for veterans interested in beekeeping. We received letters from the American Legion, Veterans of Foreign Wars, Office of Retraining and Reemployment, War Mobilization and Reconversion, War Manpower Commission, and Veterans Employment Service, pledging full assistance and cooperation in our program.

"During the summer month, Dr. V. G. Milum, then Acting Secretary-Treasurer, of the Federation, mailed to each state association secretary, and to each State Representative of the Veterans' Employment Service, a form letter that acquainted each with our program and indirectly introduced each State Representative to the association secretary of that state. Copies of Occupational Abstract No. 79—BEEKEEPING, and the Veterans Rehabilitation Administration, Form 1904 (Agreement to Train on the Job Disabled Veterans of World War II) were included in the mailing.

"The bee journals cooperated by carrying free classified ads calling veterans' attention to the beekeeping field, and offering free counseling

service. Letters from veterans as the result of these notices and one carried in the Legionnaire magazine numbered 102. These were all answered with personal replies, suggesting paths to follow, and cautioning of the hazards of beekeeping, as an occupation, as well as enumerating the many advantages. The veterans' communications on this particular survey will not portray much concrete advantage to beekeepers wishing to employ veterans. For most of the letters were from men still in the service and still outside of the United States, and men who had had a little experience and who were interested primarily in re-establishing themselves or increasing their present holdings.

"A survey among the beekeepers brought forth many good offers to veterans seeking employment. Among the 25 offers, we wish to cite two examples: From Onsted, Michigan—'We would like a married veteran, as we can offer a vacant house, recently remodeled, new floors, and bathroom completed soon.' From Carlos, Minnesota—'Wish a single man. Will pay \$5.00 a day and board to start, with a bonus of \$1.00 per day at end of completed season.'"

"We also compiled a list of available beekeeping training programs as offered by the various land-grant colleges. Here again we were assured of genuine cooperation, including field training.

"Under the "G. I." Bill of Rights (amended), educational allowances for veterans are up from \$50.00 to \$65.00 per month for single men, and up to \$90.00 from \$75.00 for married men. Loan benefits guaranteed by the Government will be available for six years after service separation in-

stead of for two years. It is no longer necessary to obtain the approval of the Veterans Administration on loan applications. The 25-year age restriction on education has been removed, and the repayment period on loans has been extended from 20 to 35 years.

"It was the purpose of our committee to determine how best the Federation could serve veterans interested in beekeeping. After prolonged and serious study we agree, as will most of you, that the best training for the beginner veteran beekeeper will be obtained through employment with an established and successful commercial honey producer; and that the veteran should be encouraged by his employer to enroll in a short or special course in beekeeping held during the winter season by most agricultural colleges. By first hand observation the veteran can soon gather whether or not he is suited to beekeeping, before he has lost a considerable sum of money in a project that requires steady application year after year.

This committee recommends that its correspondence be turned over to the Federation secretary, and that future inquiries be handled through that office. That the Federation News Letter carry a list of veterans seeking beekeeping employment, and a list of beekeepers wishing to employ veterans. To keep the listing active and up-to-date, names will be run only once, unless a request is forwarded stating that the name is to be repeated. That the bee journals be asked to carry a duplicate listing of these names without charge.

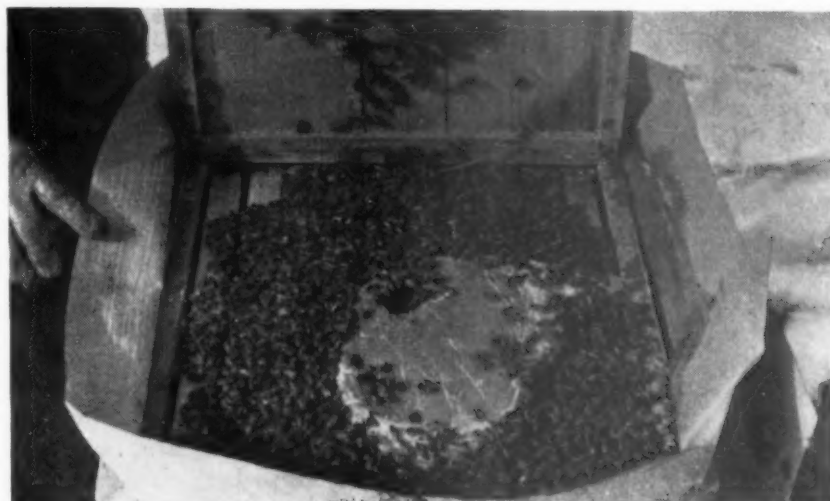
"Beekeepers who wish to employ veterans, and veterans seeking employment in the beekeeping field, should send name, address, and details to: Glenn O. Jones, Secretary-Treasurer, National Federation of Beekeepers Associations, Atlantic, Iowa.

Respectfully submitted:

Elmer Carroll,
H. J. Rahmlow,
J. F. Reinhardt.

January 16, 1946."

HOW TO DO IT



—Photo by Dr. C. L. Farrar.

How to Feed a Pollen Substitute

This illustration shows how a feeding of either pollen substitute or pollen supplement is given to the bees on top of the frames where they will use it readily. Pollen supplement is a mixture of pollen trapped in summer and stored through winter to mix with expeller process soybean flour at the rate of one part of pollen to three of flour, moistened with a two to one syrup, until it is of right consistency. Don't make it too dry, just short of runny.

We make the pollen substitute from one part of animal type brewer's yeast to three parts expeller soybean flour, mixed with a one to one sugar syrup in the same manner.

A two-pound cake, every ten days, from March first until pollen is abundantly available will help any colonies short of pollen, or package bees, or divisions, in the spring.

WEEDS AND GRASS IN THE APIARY

One of the problems always confronting the beekeeper is keeping weeds and tall grass from growing up around the hives. Take ordinary grain bags unfit for further use and dip in a thin mixture of concrete. Spread them flat under the hives with a pint of creosote under each bag. The treated bags project several inches on each side of the hive and allow you to

mow up to them with a field mower.
John S. Gwaltney,
Alabama.

TO GET COLONIES FROM WALLS

Fix a scaffold about twelve inches from the wall on a level with the hole the bees use, then place a hive body on it with a laying queen and a nucleus, finish filling out with comb or foundation. Keep a wide opening

to the hive. Stop all entrances in the wall except one and put a bee trap over the entrance or make a tunnel out of screen wire so when the bees come out they can't get back but go to the nucleus. After you get what bees you want put your garden hose on the exhaust of your car and start the motor, put the other end of the hose in the wall. That will kill all the bees left.

J. C. Glass, Texas.

SMOKER FUEL

I have used corn cobs for smoker fuel for a couple of years and like it. I start the smoke with a little burlap and then add ground cobs. They give a cool smoke even if the smoker is used constantly. There is one defect, they fall out the snout. To check this cut a small square of ordinary window screen about an inch and a half and push it into the smoker snout from the inside. You will have to clean it once in a while or replace but it will save a lot of trouble.

Charles B. Miles, Iowa.

BURLAP FOR FUEL

I find burlap a good fuel for bee smokers, making plenty of smoke. Corn sacks can be bought cheaply from most any store and is usually abundant.

William Andera, Iowa.

SETTING UP SECTIONS

How much easier it is to set up sections with one full size piece of thin foundation than to use the old plan of fastening in two pieces. File a little groove in the section, fold it around a piece of foundation cut to size and it just can't sag or fall out.

Rosena M. Pullen,
Michigan.

MAKING HIVES LAST LONGER

In these times of lumber shortages the beekeeper will find it worth while to dip the dovetailed ends of new hives and supers into thin paint or pure linseed oil before nailing them together. This will make the corners water proof where they usually rot first and then give the equipment a good coat of paint at least every two years.

Thomas J. Osborn,
Oklahoma.

This time we pay Dr. C. L. Farrar, of Wisconsin, \$5.00 for this "How To Do It" with picture above. What's the matter? Are you afraid to try it? We have only received two pictures of "How To Do It" items. This simply means that it is too early to get out the old camera, or you are scared, or as a last resort we will have to go right through the year using our own illustrations and so someone is going to lose a lot of "moolah" (as Phil Baker says). Get a good picture of a "How To Do It" item. Sharp, clear, illustrating the item well and tell your story, short and to the point. We will pay \$5.00 for each one selected for publication. We will continue to advance subscriptions three months for every item used without illustration.

HONEY AS MEDICINE

THE New York Times has recently published an account of research conducted by forty medical institutions in Russia to determine the value of honey as medicine. Honey was reported as beneficial in cases of jaundice, chronic dysentery, swellings caused by heart and kidney ailments and other diseases. Honey was also found helpful in treating wounds.

In view of the vast amount of research in this country it seems a bit surprising that so little is known about honey, one of the oldest of human foods. If the honey producing industry is to prosper more attention must be given to the investigation of our product.

PERMANENT APIARIES OR MIGRATION

IN "Beekeeping Up-To-Date," the author, Joseph Tinsley, gives an interesting account of the difference in yield from heather of colonies in permanent apiaries and those carried to the moors for the flow. The usual practice is to move bees to the heather when it starts to bloom, about the 12th of August. A comparison of the crops of heather honey secured by migratory beekeepers with those in permanent apiaries indicate that an increase of fifty per cent favors the resident apiary.

Conditions in Scotland differ from those which prevail in this country but Tinsley's observation raises a question as to whether our migratory bee-men may not be wasting a lot of time and effort in moving. Does anybody know whether the bee-man gets enough more honey from migrating to temporary pastures to pay for the extra cost?

THE BEE PASTURE PROBLEM

SINCE the beekeeper is dependent upon the crops grown by others for his bee pasture it is highly important that the industry give some attention to the development of new farm crops. The acreage of soybeans in 1909 was estimated to be only 2,000 whereas 25 years later in 1944 it was 14 million. There are no figures available which will enable us to estimate the number of acres of alfalfa and the clovers which have been replaced by these millions of acres of soybeans

THE KEY TO HONEY

The beekeeper was given a new place in the national operations of the U. S. Soil Conservation service, an important feature of the program and it was extremely important matters cut down the time available to him.

Mr. von Trebra pointed out the close relationship between the health of the population. He cited the high percentage passed the army requirement and the low percentage of rebuilding our depleted soil to rebuild national health as which provide food without loss of fertility along with the topsoil. The close relation between proper soil use and demonstrated.

Since soil conservation is only possible with the use of legumes assumes an importance too long overlooked. The enormous reconversion of agriculture to a peacetime economy suggests yields of such seeds lies in the fields already planted can millions of flowers. The honeybee is the only insect using the

Only in very recent times has the service of the honeybee in the nation might be at stake has been overlooked since the legumes and since many legumes depend upon the honeybee ship can readily be seen. Since good health is only possible through von Trebra very logically puts the beekeeper in a key position generally understood the future prosperity of the honey producer.

but there are many beekeepers who have seen good clover fields plowed up to grow soybeans. As individuals we have seen our bee pasture disappear to make a place for the new crop.

Now that the war is over an extensive readjustment in farm acreage will soon take place. The search for new crops will continue and it is to the beekeeper's advantage to call attention to bee plants which can be profitably grown for other purposes. Beemen have been largely responsible for popularizing alsike clover and sweet clover. Other valuable plants will find an equally important place. The honey plant committee of the National Federation is working hard to serve the industry in this field.

COLOR OF HONEY

A sample of heartsease honey coming from an apiary in a sandy neighborhood is very light in color although retaining the characteristic flavor. Honey from heartsease in our apiary, in a neighborhood with a rich black soil is amber in color. Indications are that the soil is responsible

KEY TO HEALTH

the national economy by R. L. von Trebra, Regional Chief of the Indianapolis convention. His address was an outcome of the unfortunate that the pressure of discussion of less immigration.

relationship between the soil fertility on which our food is grown and the percentage of recruits from areas of good soil fertility who are in regions of poor soils. He stressed the importance of both as well as prosperity. He pictured the conditions which result in erosion and loss of the soil and the conservation of the water supply was effectively

the use of legumes along with other plants, the honeybee and the enormous total of legume seed now urgently needed for the honeybees the imagination. The only source of increased production can only be secured by better pollination of the honeybees this need whose numbers can be controlled.

the honeybee in pollination been recognized. That the very life of the honeybee since the fertility of the soil is largely dependent upon the honeybee for pollination the importance of the relationship is only possible to persons whose food is grown on good soil, a composition in our national economy. Once this fact is established the honey producing industry is assured.

for the difference in color in this case. Other factors may also have an influence. Altitude, humidity, temperature and growth of the plant all contribute.

Recent investigations indicate the presence or absence of certain minerals determine the color variations and account for the differences. Sandy soils are likely to be deficient in minerals. The dark honeys have been found to contain more minerals. Thus the honey produced in the neighborhood where the soil is rich occasions no surprise by its darker color.

Yet we find sweet clover honey from this same rich soil is very light in color and we find ourselves unable to tell why the heartsease should provide minerals with nectar while the sweet clover fails to do so. We still have much to learn.

NEW BEE PASTURE FOR THE SOUTH

IN the October 5 issue of Seed World is an interesting story of Lespedeza bicolor and its use in the South. Plantings have been made from Virginia to Florida and west to Arkansas and Louisiana.

The plant is very coarse and woody as has been mentioned in this magazine and is unsuited for hay. It does provide good browse for cattle and is a good plant to control erosion and to stop gullies. The seeds are eaten by bobwhites and the plants provide good game cover.

The areas devoted to this plant are growing rapidly and there is every indication that it will be widely used in at least seven of the southeastern states.

From Japan comes reports that Lespedeza bicolor is the principal source of surplus honey in some parts of that country. In the nine years that it has been under observation in our test garden it has rarely failed to attract the bees in large numbers during its period of bloom. It is one of the most promising of the new honey plants and seems especially well suited to a region where few nectar yielding legumes are available.

THE DOCTOR LOOKS AT HONEY

PRESENT day investigations are looking more and more to diet as the cause of human disorders. Marked changes in food habits are coming about as a result of recommendation of the physicians of the nation. Much that we know about honey is of recent discovery; and this discovery is sure to result in an increased demand for honey in place of other sweets which lack its special qualities.

Dr. H. A. Schuette, of the University of Wisconsin, has aroused much interest in the fact that honey contains practically all the minerals composing the human skeleton. He mentions especially iron, copper, and manganese. He also calls attention to the fact that dark honey contains more minerals than the light colored product.

Iron is important according to Dr. Schuette because of its relation to the coloring matter of the blood. The hemoglobin which we build from our food has the power of carrying the all-important oxygen to the tissues of our bodies. Without the iron content hemoglobin would not have the power of holding oxygen.

Copper, he states, has the power to unlock the therapeutic quality of iron in restoring the hemoglobin content of the blood of patients afflicted with anemia.

Other physicians have suggested that lack of necessary minerals in the soil on which food crops are grown may be the cause of much present day illness.

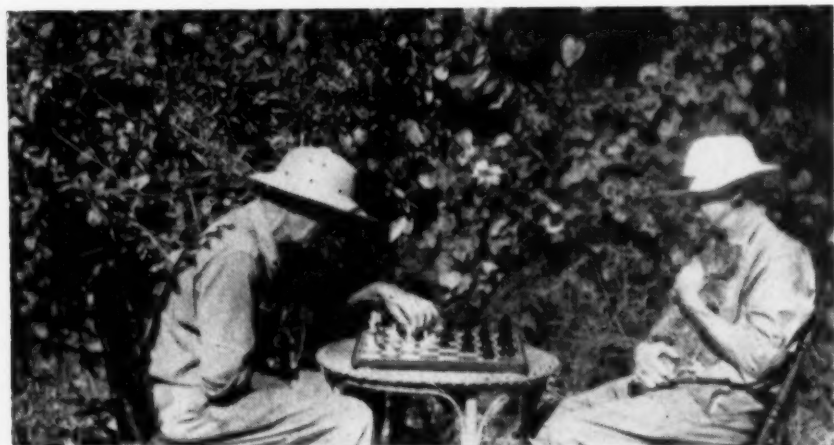
LATHAM AND SMITH IN FLORIDA



FRIENDLY enemies, Allen Latham, left, and Jay Smith, right. At 77, Allen can turn out more work than many who are fifty years younger. His record of caging 100 queens in an hour and fifteen minutes is likely the world's record.



WHO caught the biggest, Allen or Jay? T. C. Johnson, of Indiana (center) acting as judge, refuses to make a decision for fear of starting a riot.



TWO chess champs carry on. They played a last game to decide the championship. Allen won but went away leaving his northern underwear on the line.

Package Bees For 1946

2-lb. package with queen.....\$3.50 ea.
3-lb. package with queen..... 4.50 ea.
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Queenless package, deduct 90c from above price. 20% down, books order, health certificate and safe delivery guaranteed. Address

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Package Bees and Queens

2-lb. with queen\$4.00
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20% deposit with order. Balance before shipment. Reference The First National Bank, Willows, California.

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Hardy Leather Colored ITALIANS
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RED BLUSH Grape Fruit \$3.00 a bushel. Pink-meated, seedless, tree-ripened. Tree-ripened Oranges \$3.50 a bushel.

MIXED BASKETS of Red Blush Grapefruit and Oranges at \$3.25 a bushel. All F. O. B. Brownsville.

Express rates \$1.13 to \$2.37 a bushel, depending on your location. Reference, Dadant & Sons, Hamilton, Illinois, who purchase my fruit. Complete price list on request.

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We are booked up on package bees until May 10th.

PRICES
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Queens, each 1.10

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"BEST IN THE WEST"

2-lb. package with queen\$4.00
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Add 25c per package for orders of less than 50 packages. Circular Free.

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COLUSA, CALIF.

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ANY QUANTITY, QUOTE PRICE
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BRIGHT THREE BANDED STOCK

	Queens	2-Lb.	3-Lb.	4-Lb.
1-24	\$1.25	\$4.00	\$5.00	\$6.00
25-99	1.15	3.75	4.75	5.75

April and May Booking. For queenless packages deduct price of queen.

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Health Certificate and safe arrival guaranteed. 20% deposit on booking orders.

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Gentle Northern Queens

FROM PROLIFIC 3-BANDED ITALIAN
BREEDING STOCK

All queens reared under natural conditions in large over-wintered queen-right colonies under supersedure impuse, this being nature's way of producing large, yellow queens that are fully developed.

Some of this stock was recently shipped by air to China, and were successfully introduced.

All shipments will go by air mail starting June 1st, \$1.10 each. Please let me book a trial order for 1946, and show you some young northern queens of quality. Prompt service, satisfaction.

BARGER APIARIES
CAREY, OHIO



E. L. SECHRIST, author of "Honey Getting" and Dr. Thomas J. Barrett, authority on earthworms and author of "Harnessing the Earthworm" are near neighbors. Insert shows earthworm capsules.



Sgt. Marvin Landman, Army Engineers, sent this from Germany, a true picture, he says, of German beekeeping. Some of these small apiaries were pretty well torn up by the action of the war.

For the Ladies



—Photo from John Allen and Sons, West Lafayette, Indiana

WITH March winds whistling around our yards and the promises of a fresh, new spring in the air, let's turn our thoughts to some ideas for perking up lagging spirits and appetites. Just to keep in the swing of the times in this month of shamrocks and the wearing of the green, why not dress up your table with refreshing Honey Delight. The delight will transfer itself from the dessert to the faces of your family when they taste the first forkful.

Honey Delight

1 package lime flavored gelatin
 $\frac{1}{2}$ cup boiling water
 $\frac{1}{2}$ cup honey
 Juice of $\frac{1}{2}$ lemon
 1 can (tall) evaporated milk
 $\frac{1}{2}$ pound vanilla wafers

Dissolve gelatin in boiling water. Add honey and lemon juice and mix well. Fold in the evaporated milk that has been chilled and whipped. Pour this mixture into a pan that has been lined with crushed vanilla wafers. Place crushed vanilla wafers on top and put in refrigerator to set.

For a St. Patrick's Day party, cut into squares for serving and omit the vanilla wafers on the top. Make a shamrock design of white icing on each serving with a cake decorator.

For a real pick-me-up beverage, a cup of tea is definitely in order, especially when it's sweetened with honey. Scientific tests have shown that it will perk you up both mentally

and physically. Of special interest to nutrition minded homemakers is the fact that tea contains a generous proportion of the daily allowance of riboflavin or Vitamin B2. This is apparently a contributing factor to the absence of riboflavin deficiency diseases in the tea-drinking British Isles.

Here is a tip for newly initiated farm homemakers who have a cow or two to provide for the family's milk needs. Cream will separate from the milk much more rapidly if it is allowed to stand in a deep, narrow, straight-sided container rather than a wide shallow one.

While we are still on the subject of dairy products, milk solids are soon to be sold in dried bar form like a cake of soap. All you need to do is add water and the result will be either milk or cream, depending on the amount of water used.

More and more varieties of frozen baked goods are now being made in commercial quantities and will soon be available all over the country. Pies, cakes and breadstuffs will come all ready for the oven. Baking while still frozen gives the best results and takes only five minutes longer than baking the thawed product.

What you want to know

S. L. Heaps, of Kewanee, Illinois, asks about the importance of DDT to the beekeeper as well as farmers and orchardists. From the standpoint of pollination it may be serious.

So far in using DDT it appears much of the spraying can be done on the plants the bees visit without killing the bees unless the bees are actually on vegetation when spray is applied.

At present big poison difficulties seem to come in sections where dust or spray is applied from airplanes for it not only reaches the crop but drifts without restriction everywhere. We may in the end be glad to exchange arsenicals for DDT.

Turner S. Baker, of Haines City, Florida, wants to know if there are courses in beekeeping under the G. I. Bill of Rights. He is a discharged veteran who wants to make beekeeping his work.

Practically all agricultural colleges are in a position to take care of the returned soldier for education in beekeeping. Each veteran can write his own state department of agriculture, agricultural college for information.

On page 375, October American Bee Journal, 1945 is a list of courses in beekeeping given in the United States.

E. F. Owen of Fresno, California, asks if a Modified Dadant brood chamber with three partitions in it with brood frames and entrance on each of the four sides will do for nuclei or reservoirs.

That should succeed very well. We use anything from two frames up for reservoirs regardless of size of frames although it may be in small compartments. It is necessary occasionally to replenish by exchanging empty frames for frames of emerging brood from other colonies to keep the reservoir nuclei in strength. This is particularly true if you try to carry on a nucleus without a laying queen in it.

How Do You Stop Robbing?

This is a question frequently asked. The following is from Mr. Edward Tomlinson, of Vermont.

To control robbing I use a hive body with one comb of honey inside. All

my hives and supers have a $\frac{3}{8}$ inch hole in them so I don't have to make any other entrance. Place some cyanogas in the hive and all the robbers go in and never come out. It is surprising how few robbers have to be killed to restore order.

* * * *

Robbing always starts in weak colonies. When I find robbing I close the entrance of the colony being robbed to $\frac{3}{8}$ inch by two inches. I exchange the positions of two colonies putting the colony which is being robbed in the place of a strong colony and placing the strong colony in the position of the colony which was being robbed. It is much like Cale's re-location plan as a means of swarm control, only the entrance of the colony being robbed is shut down. It works every time, and, of course, does the weak colony a world of good and does not injure the strong one.

Virgil R. Keith, Alabama.

* * * *

A Minnesota reader asks, "What is Coumarin in sweet clover and what effect does it have." The inquiry was referred to Dr. E. A. Hollowell, of the United States Department of Agriculture who replies as follows:

"Coumarin is a white crystalline compound of vanilla-like odor that is found in several plants, including the common sweet clovers. The coumarin content of biennial white and yellow sweet clovers, ranging from 7 to 2.0 per cent, varies between plants, different parts of the plants, and stage of growth. Older leaves and stems have a lower coumarin content than young leaves and stems. The species *M. dentata* is free of coumarin but due to a lack of vigor, it has little agricultural value except for breeding purposes.

When sweet clover hay is improperly cured or sweet clover silage is poorly preserved, a decomposition product of coumarin may develop. Such hay or silage is toxic to livestock, causing bleeding. Investigations to develop varieties of sweet clover that are low or free of coumarin for farm use have been in progress for several years. Due to the difficult nature of the problem and limited facilities, progress has been slow and to date low or coumarin free varieties are not available."

E. A. Hollowell,
Senior Agronomist.

Institute News Notes

If you haven't given a copy of the recipe "A Honey of a Chocolate Cake" to your customers and prospective honey customers, please do. It will be good business for you to distribute a few hundred of these leaflets. A picture of the cake is on the cover. 250 will be send you, postpaid, for \$1.00. Women are writing us about this excellent cake and asking for more honey recipes. Here is the recipe:

Honey Chocolate Cake

Preparations: Have shortening at room temperature. Grease two 9 inch layer pans or 10x10x2 inch pan, cover bottoms with waxed paper, and grease again. Start oven for moderate heat (350° F.) Sift flour once before measuring.

Measurements

Measure into sifter:

2 cups sifted cake flour

1½ teaspoons soda

1 teaspoon salt

Measure into bowl:

½ cup shortening

Mix in small bowl:

1¼ cups honey

2/3 cup water

1 teaspoon vanilla

Have ready:

2 eggs, unbeaten

2½ squares unsweetened chocolate, melted.

Now the "Mix-Easy" Part:

Mix shortening just to soften. Sift in dry ingredients. Add ½ cup of the liquid and the eggs. Mix until all flour is dampened; then beat one minute. Add remaining liquid and melted chocolate, blend, and beat two minutes longer. Batter will be thin. (Count only actual beating time. Or count beating strokes. Allow about 150 strokes per minute. Scrape bowl and spoon or beater often.)

Baking:

Turn batter into pans. Bake in moderate oven (350° F.) about 30 minutes for layers or about 40 minutes for square cake. Frost with your favorite frosting.

Note: Mix cake by hand or at low speed of electric mixer.

The honey flow will be on soon and may it be a big and good one for we are selling not only a product but a standard of living as well. Honey is becoming a staple article in the home. Let's make it available the year around.

* * * *

If you are going to need a supply of "Old Favorite Honey Recipes" for a Fair or other Exhibit, do place an order soon.

* * * *

Every now and then someone who has been in the service calls at the office. Yesterday Mr. Walter Cox, who has recently returned from India, paid us a visit. He brought us some honey from India. Mr. Cox will soon start keeping bees as his profession.

* * * *

Orders for the 1946 calendars are still coming in. We are sorry we cannot fill the orders. We had paper for but 50,000. Orders are coming in now for 1947 calendars. We'll try to have these ready in September or October for you and will have 100,000 for the first printing.

* * * *

The following recipe for Fig Preserves has been used and liked very much by women in Bexar County, Texas.

Fig Preserves

2 quarts figs

1 pint honey

1 pint sugar

3 cups water

Several slices of lemon rind cooked in half cup water (if desired)

Select the best figs, thoroughly ripe, but not soft. Leave about ½ inch stem on figs. Sprinkle figs with 1/3 cup soda and 5 cups boiling water. Let stand for 5 minutes to remove fuzzy outer layer of skin. Rinse thoroughly and drain well, or dry. Boil sugar, honey and water together for 10 minutes before adding figs. Add figs slowly in order to keep syrup boiling gently. When all figs have been added, boil in covered kettle until figs are clear. Skim and let stand over night. Drain off syrup and boil until thick. Pack figs into sterilized containers and fill with boiling syrup. Seal at once and store in cool place.

C. G. Willman Apiary

240 MAIN ST.
CITRONELLE, ALABAMA

Queens, Queens, Queens!

20 years experience raising queens in one outfit. 2 years for self.

1 to 100 \$1.25
100 or more 1.05

C. G. WILLMAN, Mgr.

Bee Supplies by Mail

Save time—Save travel—Buy early—Be safe. Lewis-Dadant Supplies in stock. Inquiries from Ohio and nearby states solicited.

SWISHER'S MARKET

P. O. Box 806, Springfield, Ohio

ITALIAN BEES AND QUEENS

2-lb. pkgs. with queen \$3.50
3-lb. pkgs. with queen 4.50
4-lb. pkgs. with queen 5.50
Health certificate and safe arrival guaranteed. 20% deposit on booking orders.

N. DEO. GAUTHIER

HESSMER, LA.

Italian Queen and Package Bees

AT THE FOLLOWING PRICES

	1-24	25-49	50 Up
2-lbs. with queen	\$4.00	\$3.85	\$3.75
3-lbs. with queen	5.00	4.85	4.75

We guarantee full weight on all packages, and prompt shipment.

ELDRED J. COCO

HAMBURG, LOUISIANA

Have Some Choice Shipping Dates

Still open for those good packages of young ITALIAN BEES and QUEENS. Write us quantity needed and we will gladly quote you.

RAPIDES APIARIES

WINNFIELD, LOUISIANA

3-Banded Queens—Italians

Highly Productive Strains.

1-24, \$1.25; 25-99, \$1.15; 100 up \$1.05
Quality and Service Guaranteed.

Allen Apiaries

610 Cherokee St. Mobile, Alabama

Mr. Honey Producer

Join a progressive cooperative now and safeguard your future market. We need the honey at ceiling prices. You need us to safeguard the time when selling is hard. Join now.

For particulars write

Illinois Honey Producers Assn.

Mt. Sterling, Illinois

Meetings and Events

South Carolina, Columbia, March 13

The Palmetto State Beekeepers Association meeting will be held in the Chamber of Commerce rooms in Columbia, South Carolina, on March 13. An unusually good program has been lined up. Beekeepers of South Carolina make this a rousing meeting!

E. S. Provost,
Extension Specialist.

Butler County (Ohio) March 12

The Butler County Beekeepers' Association will hold its winter meeting, Tuesday, March 12, at 8 P. M., at the Y. M. C. A. in Hamilton, Ohio. Election of officers will be held at this meeting. Mr. Charles Reese, State Apiarist, will be the guest speaker.

W. D. Redding, Pres.

G. A. Carpenter

We regret to announce the death of G. A. Carpenter, Riverside, California. He was a life-long beekeeper. Recently he perfected a high-grade electric imbedder, offered in our advertising. Mrs. Carpenter with associates, intends to carry on both the bees and the manufacture of the imbedder.

Virginia, March 6

The annual meeting of the Virginia Association will be held in Lynchburg, March 6, 10:00 A. M. to 3:30 P. M., Chamber of Commerce Room, Allied Arts Building. This is a very important meeting. All beekeepers are urged to attend.

Henry W. Weatherford,
Secretary.

Sigfred F. Peterson

Sigfred F. Peterson, sixty-six, Plow City Garage, Moline, Illinois, died November 19. He was the oldest garage-man in the quad-city area. He was a member of the Rock Island County Association, serving as secretary for a long time.

Correspondence Courses

Beekeepers in Minnesota have the advantage of a correspondence course, finding wide reception. Dr. M. H.

Haydak, Associate Professor of Entomology will accept lessons in English, French, German, Italian, Spanish or Slavic. Professor Haydak gives the students personal guidance and advice. The course tells how to start in beekeeping and how to carry through the season. Write: Correspondence Study Department, General Extension Division, University of Minnesota, Minneapolis 14, Minnesota.

Serving the Veteran

Veterans with more than ten per cent disability can receive "on-the-job" training in beekeeping through their district Veterans Administration office.

Able-bodied veterans are also granted this training, but must apply through a different channel. All state departments of public instruction, or education, through their vocational education divisions, are responsible for this program. Veterans wishing "on-the-job" training in beekeeping should apply to their state office of public instruction or education.

Commercial beekeepers and apicultural instructors wishing to teach veterans while employing them, should also get in touch with their state department of public instruction, outlining what they have to offer. Beekeepers will be required to submit a schedule of training, both in the field, and some book work. A beginner's textbook and one or two other bee books should be used.

This training program is just getting under way, and we will try to have more information on it later. It is the same type program recommended to the Federation by this committee at the last annual convention.

Elmer Carroll, Chairman,
Veterans Rehabilitation Com.
National Federation of Beekeepers Associations.

Charles Mondeng

Charles Mondeng, Minneapolis, long time beekeeper and manufacturer has passed on. Born in Germany in 1865, he died at the age of 80, January 18.

He was interested in bees his entire life but relinquished active management for the past ten years to his

son-in-law, George H. Swanson.

Mr. Mondeng reared queens to some extent earlier, known as the "Adel" queens, which had considerable prominence for their gentleness and fine color. He had a considerable library. Our sympathy goes to the family.

New Rochelle (N. Y.) March 17

The New Rochelle Association will hold their regular monthly meeting at the New Rochelle, Y. M. C. A., 175 Division Street, Club Room B, Sunday, March 17, at 2:30 P. M. There will be a talk on installation of packages and a film, the title of which is not known at this time. Refreshments will be served.

B. F. Miller, Publicity.

Dr. Clay Lyle Made Dean of School of Science

Dr. Clay Lyle, state entomologist of Mississippi and in charge of apiary inspection in the state, has recently been made Dean of the School of Science of Mississippi State College. Congratulations.

K. Hawkins, Wisconsin.

Edward Carson Dickey

Edward Carson Dickey, age 93, who had devoted a lifetime to beekeeping, considered it his sport to hunt bee trees in the rugged Ozark Mountains. He recently died at Harrison, Arkansas. He had been a resident of the Cave City community, Newton County, all his life, the only county in Arkansas with no railroads. Hunting bee trees and wild honey therefore, was a natural for this reason and profitable according to Mr. Dickey. Mr. Dickey is survived by seven sons, one daughter, three brothers and one sister.

Ralph Underhill, Arkansas.

Washington State Association

The Washington Ass'n. reached a new point in their history as a result of a joint meeting of the Pollination Committee and the Tree Fruits Pollination Committee of the State Horticultural Association. A very harmonious meeting agreed that a standard commercial colony shall consist of at least four standard frames of brood covered with the proper amount of bees at cherry blossom time. County agricultural agents were chosen as the clearing house medium for information regarding the need and supply of bees for commercial pollination.

George N. Paige, chief state in-

Italian Bees and Queens

A new name, but old quality. Ten years a commercial queen breeder. We have no old customers. We intend to keep the new ones we get with quality bees and service. Open dates in April and May. 10 per cent books your order, balance 10 days before shipping.

	Queens	2-Lb. Fkg.	3-Lb. Pkg.
1-25	\$1.20	\$3.75	\$4.75
25 up	1.10	3.50	4.50

Attention package men and large queen users: Special discount and terms. Write for particulars.

BAYOU BEE CO. : Bourg, La.

Raymond Viguerie, Owner

"LEST YOU FORGET, FOLKS"

Now is the time to take advantage of those choice remaining delivery dates left for our reliable **Light Three-Banded Package Bees and Queens**, second to none when there is work to be done. Usual live delivery. 10% now will reserve date. Quoted with young selected untested laying queen. No C. O. D. orders. Health certificate and full weight guaranteed.

	2-Lb.	3-Lb.
1 to 24 each	\$4.00	\$4.80
25 to 49 each	3.75	4.60
50 on up	3.50	4.40

Plauche Bee Farm : Hamburg, La.

NEED QUEENS?

We have open dates for straight queen orders March 20th on. Send your order—large or small. Order by mail, phone or wire. Prompt reply. We still have packages available in May on. Send us your inquiry. We offer Three-Banded Italians. Live delivery, health certificate, satisfaction. 10 per cent books your order, balance 10 days before shipping. Queens postpaid, packages Express collect.

	Queens	2-Lb.	3-Lb.
1-25	\$1.10	\$3.50	\$4.50
25 up	1.00	3.40	4.40

SUNKIST BEE COMPANY, Route 2, Box 9, Houma, La.

TELEPHONE 1299-J

Package Bees, Old Line Bred Since 1924

1 QUEEN \$1.25. 25-UP \$1.10. 2-LB. BEES \$3.80. 3-LB. BEES \$4.80

EXTRA POUND BEES \$1.15

Place your order early to get your shipping date when wanted. War II veterans first served. Spring queens raised from stock of over 200 pound production after pulling bees for packages all spring till in July 1945. Also resistance queens direct from government stock at same price.

Homer W. Richard : Rt. 3, Box 252-A, El Dorado, Ark.

● Three Band Italian Bees with Queens for 1946 ●

PLENTY QUEENS MARCH 1ST. THROUGH SEASON \$1.25 EACH

Quantity	1 to 24	24 to 48	48 Up
2-Lb. package	\$4.00	\$3.75	\$3.60
3-Lb. package	5.00	4.75	4.60

20% deposit books order, balance ten days before shipping

E. R. RALEY, Box 1610, Daytona Beach, Florida

CARNIOLANS PACKAGE BEES WITH CARNIOLAN QUEENS. 2-lb. bees with queen \$4.00; 3-lb. bees with queen \$5.00. Over 24 packages, deduct 25c each package. We offer 2000 packages, APRIL DELIVERY.

EPHARDT HONEY FARMS, PLAUCHEVILLE, LOUISIANA

American Bee Journal Classified Ads Bring Satisfactory Results

Lest You Forget the Good Rule to Go By

BUY YOUR BEES AND QUEENS FROM ALABAMA APIARIES

1-24	2-Lbs.	3-Lbs.	Queens
25-99	\$4.00	\$5.10	\$1.25
	3.75	4.80	1.15

Our aim, once a customer, always a customer.

Alabama Apiaries : Uriah, Alabama



D. B. Eells

OPEN DATES

STILL AVAILABLE on

3-Banded Italian Queens and Packages

10% books remaining dates for April and May. Balance due on account before shipping date. LIVE DELIVERY GUARANTEED on FULL WEIGHT PACKAGES. Shipped disease FREE in new containers.

NOTE: SMALL RUSH ORDERS by wire with 100% remittance filled on open dates only. Deduct price of queen for queenless packages. Write for prices on 4-lb. and 5-lb. packages.



SPECIAL!

EARLY QUEENS FOR SOUTHERN BEE-KEEPERS — MARCH SHIPMENTS — \$1.25 EACH, POSTPAID, ANY NUMBER.

PRICES—APRIL 1ST TO MAY 31ST

Prices	QUEENS	1-24	25-99	100 Up
	2-lb. and queen	\$1.10	\$1.05	\$1.00
	3-lb. and queen	3.90	3.80	3.70
		4.90	4.80	4.70

QUALITY—RAPID, HONEST SERVICE

EELLS HONEY & BEE COMPANY, Houma, La. U. S. A.
(IN THE SUNNY SOUTH)

WICHT'S

3-BANDED ITALIAN PACKAGE BEES AND QUEENS ARE EXCELLENT

Our recommendation to you: Ask our customers.

Accepting orders for 1946 packages that will be shipped on time.

WICHT APIARIES

406 Miller Street : Hattiesburg, Miss.

IT WILL PAY YOU TO

INVESTIGATE

A Neises Gravity Clarifier and Filter

can save you much time. Find out how to handle your honey by using this modern labor-saving equipment.

REUBEN NEISES

908 S. Cherry St.

MARSHFIELD, WISCONSIN

Italian Bees and Queens

MARCH 15 TO APRIL 15 DELIVERY

2-lb. package with queen	\$4.00
3-lb. package with queen	5.00

Gilbertson Apiaries

BOX 562 BROWNSVILLE, TEXAS

Italian Package Bees and Queens

	1-24	25-49	50 up
2-lb. with queen	\$4.00	\$3.85	\$3.75
3-lbs. with queen	5.00	4.85	4.75

We are booked to capacity until May 10, 20% deposit books your order after May 10. Live delivery guaranteed. No C. O. D.

Oscar Arnouville

Hamburg, La.

Box 35

GARON'S PACKAGE BEES AND QUEENS

EARLY QUEENS—FROM MARCH 10TH TO EARLY APRIL.

ALL OUR PACKAGE PRODUCTION BOOKED UP TO EARLY MAY

Send in your orders for Package Bees and Queens for shipment after May 10th promptly for best remaining dates.

Progeny-Test 3-Banded Italian Strain. Also, Charles Mraz's and other Reliable Breeders' Strain of High Quality Daughters of Stock Bred for Resistance.

Quantity	2-lb. pkg. with queen	3-lb. pkg. with queen	Queens
1-9	\$3.70	\$4.70	\$1.10
10-24	3.60	4.60	1.05
25-99	3.55	4.55	1.00
100 and up	3.45	4.45	.95

DEPENDABILITY, QUALITY AND SERVICE

GARON BEE COMPANY Donaldsonville, La.

Italian Bees and Queens

Write or wire us your orders before we are booked up.

	1 to 24	24 to 48	100 Lots
2-lb.	\$4.00	\$3.75	\$3.50
3-lb.	5.00	4.75	4.50

ITALIAN QUEENS

1 to 50, \$1.25 50 to 100, \$1.10

HUBER FOREHAND

SATSUMA, ALABAMA

42 YEARS AMONG THE BEES

When Writing Our Advertisers Please Mention the Bee Journal.

American Bee Journal Classified Ads Bring Satisfactory Results

Leather Colored Italians

Now booking orders for queens and packages for delivery after May 15th. 25% deposit books your order for the day you want them.

2 pound package with queen	\$4.00
3 pound package with queen	5.00
Orders of 19 or less 25c additional.	
Queens— 1 to 9	\$1.25
Queens— 10 to 24	1.20
Queens— 25 to 99	1.15
Queens—100 up	1.10

For shipments after June 1st, deduct 10c from the above prices. Book your orders now and assure yourself of the best.

Gold Flat Apiaries
NEVADA CITY, CALIFORNIA

YOU WILL BE PLEASED WITH OUR Dark Three-Banded Italians FOR BETTER HONEY PRODUCTION

We offer good bees, good queens, in good equipment with good service. 20% down books your order, balance before shipment. Prices include queens that have been laying long enough to insure smooth egg laying pattern. For queenless packages, deduct \$1.00 from price.

1-24	2-lb.	3-lb.
25-up	\$3.90	\$4.90
	3.65	4.65

Extra queens \$1.25 each.

LOUIS L. COUCH

The Village Beekeeper
PINEVILLE, LOUISIANA

TRY MY 3-BANDED ITALIAN QUEENS

Pure mating and satisfaction guaranteed. Write for prices. Opening dates begin April tenth.

S. C. ZEIGLER
FORT DEPOSIT, ALABAMA

PROMPTNESS Built Our Business

FOR A BIGGER HONEY CROP GET OUR THREE-BANDED ITALIANS
96% Baby Bees and 4% Teachers
2-lb. pkg. bees and queen \$4.00
3-lb. pkg. bees and queen 5.00
Extra queens 1.30
Combless bees, lb. 1.25
Get the best while it lasts. 26 years in the bee business, from 1920 to 1946.

DUPUIS APIARIES

Andre Dupuis, Prop.
BREAUX BRIDGE, LOUISIANA

PIGEONS

If you are interested in Pigeons, you need the AMERICAN PIGEON JOURNAL, an informational instructive 52 page monthly magazine, sample 15c; 12 months, \$1.50.

AMERICAN PIGEON JOURNAL

Dept. B Warrenton, Mo.

PACKAGE BEES APRIL 15 TO MAY 30 DELIVERY

	1-24	25-99	100
2-lb. and queen	\$4.00	\$3.75	\$3.50
3-lb. and queen	5.10	4.80	4.50

Booking orders NOW.

L. L. BOND
BOX 111, UNION, MISS.

PACKAGE BUYERS

Again we offer the same high quality Italian queens and packages as in the past and expect to give the same "on time" service, and careful attention to every order.

	1-24	25-99	100-up
2-lb. pkg. with queen	\$4.00	\$3.75	\$3.50
3-lb. pkg. with queen	5.00	4.75	4.50
Extra queens	1.25	1.15	1.05

For queenless packages deduct price of queen. Add \$1.00 per pound for larger packages.

W. E. PLANT

Hattiesburg

Rt. No. 2

Mississippi

YORK'S Package Bees and Queens For 1946

QUALITY BRED ITALIANS

No Change in Price For Coming Season

PACKAGE BEES WITH YOUNG LAYING QUEENS

Quantity	1 to 2	3 to 27	30 to 96	99 up
2-lb. pkgs.	4.25 each	\$4.10 each	\$3.95 each	\$3.75 each
3-lb. pkgs.	5.25 each	5.10 each	4.95 each	4.75 each
Extra Queen	1.30 each	1.25 each	1.25 each	1.25 each

Queenless packages, deduct \$1.10 per package

Booking orders now for 1946, same terms and price. We thank our customers for their patronage and will be prepared to serve you better with highest quality the coming season. A large number of buyers have already placed orders for coming season and if you have not done so, we urge you do so without delay for better choice of shipping dates. There are every indication of an extra heavy demand. Order direct from this ad and save time.

YORK BEE COMPANY

JESUP, GEORGIA, U. S. A.

(The Universal Apiaries)

NO ORDERS WANTED

Please do not send us any additional orders for package bees.

We are also booked with all the queens we will have until May 15th.

WEAVER APIARIES : Navasota, Texas
Finest Italian and Caucasian Bees

To assure yourself of obtaining the best of supplies, read the ads of A-B-J—when writing to them, mention A-B-J



THE BIG FOUR

A Quartet of Quality

Dadant's Famous Foundations

No matter what you need in foundations, Dadants can furnish it.

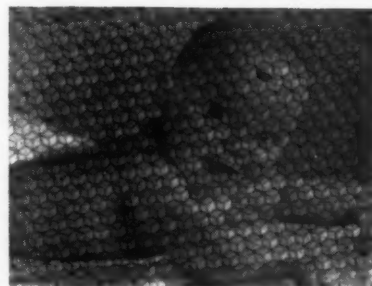
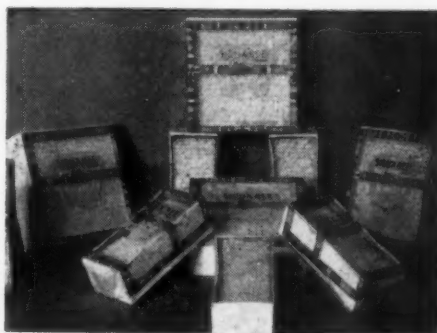
1. Dadant's Crimp-Wired Foundation. Ready wired with radiating angles of support to insure maximum worker combs and thus maximum bees for the flow.
2. Dadant's Plain Brood Foundation. A cleanly milled, thick sidewall, strong foundation, with no stretched cells. For those who prefer the plain foundation, we make as good as there is.
3. Dadant's Cut-Comb Foundation. Strong enough to stand the heat of the hive and the weight of the honey and yet insure fine, crisp, delightful combs.
4. Dadant's Thin Surplus Foundation for Comb honey. Here you get perfection in a sweet, tender sheet which the bees accept and draw readily and a finished comb that even the most fastidious will relish.

WE RENDER YOUR SLUMGUM OR COMBS INTO BEESWAX—WE work your beeswax into Dadant's Foundation.

WE BUY YOUR BEESWAX FOR CASH OR EXCHANGE IN TRADE AT HIGHEST PRICES.



DADANT & SONS, Hamilton, Ill.
Makers of Dadant's Famous Foundations



Write today for price lists—descriptive folders—and shipping tags

Sturdy ITALIANS Available

THREE BANDED ITALIANS WITH BLOOD OF D. R. S. Queens are light to golden of choice prolific stock.

	2-Lb. Pkg.	3-Lb. Pkg.	
1 to 10	\$3.90	\$4.90	QUEEN \$1.10
11 to 25	3.80	4.80	
26 to 50	3.72	4.72	
51 to 75	3.65	4.65	
76 to 100	3.60	4.60	

NEAL'S APIARIES, Box 43, Hamburg, La.

Dexter Brothers' First Quality Italian Package Bees . . . Queens

PACKAGE BEES WITH YOUNG QUEENS

	2-Lb.	3-Lb.	Queens
1-24	\$3.50	\$4.50	\$1.00
25-99	3.35	4.35	1.00
100 up	3.20	4.20	1.00

Pure mating, safe arrival and entire satisfaction on everything we ship. Free illustrated booklet with each order. It will show you how to properly install packages and introduce your queens.

TERMS: Small orders, cash in full. Large orders 20% deposit, balance to be received two weeks before shipping date.

DEXTER BROTHERS
MYRTLE BEACH, SOUTH CAROLINA

NEW WAY FOR FIRING FRAMES



"BEN BUZZ"
Trade Mark

NEW—DIFFERENT—SUPERIOR.
Ben Buzz makes frame wiring fast, easy. Frames are wired horizontally while frame is held in vertical position instead of old style way of laying frame flat to insert the wires. Simply fasten frame block and baffle box to bench with 4 screws and clamp top bar of frame to block as illustrated. Delivered complete with clamp and 1-lb. spool wire \$2.50.

Tritox Chemical Company
WASHINGTON, INDIANA

WANTED Thousands of Rabbits and other Small Stock, Poultry and Birds, Let

"STANDARD RABBIT & PET JOURNAL"

Bring you the Monthly News of Rabbit, Cavy, Small Stock, Poultry, Birds and other Pets.

STANDARD RABBIT AND PET JOURNAL
Box 251
MILTON, PA.

BUY BONDS

A Wise Investment: A Subscription to A-B-J

spector, was appointed as representative of the beekeeper to work with the horticultural field men of the association. It was recommended that rental prices for bees for Yakima and lower valley districts be \$7.50 each for one to ten colonies and more than ten colonies \$7.00 each. For the Wenatchee and upper districts, \$10.00.

National Beekeepers' Auxiliary

A meeting of the auxiliary was held in connection with the National Federation, Indianapolis, January 15.

Mrs. Howard Weaver of Navasota, Texas reported 108 members, total receipts of \$140.46. New officers: President, Mrs. H. J. Rahmlow, Madison, Wisconsin; Vice-President, Mrs. Howard Weaver, Navasota, Texas; Secretary-Treasurer, Mrs. C.R. Corey, Creston, Iowa; Directors, Mrs. Reva Todd, Des Moines, Iowa. Chairmen: Program—Mrs. Howard Weaver, Navasota, Texas; Publicity—Mrs. Elmer Carroll, Lansing, Michigan; Conservation—Rutha King, Springfield, Illinois; Gardens—Mrs. Arthur Lose, Anchorage, Kentucky.

The retiring president was appointed as Director for the Auxiliary for a term of two years.

Mrs. Harriett Grace's "What's New in the Field of Foods" was a high point talk. We hope to reproduce this completely in another issue.

Mrs. Arthur Gill's "Honey and Holidays" will also be given in full. She has many recipes for the use of honey, very well done.

Mrs. Reva Todd, Sec.

Okanagan Officers

Honorable Frank H. Putman has been elected honorary president of the Central Okanagan Division of the British Columbia Honey Producers' Association. C. C. Heighway, Kelowna, president; W. Ingram, of West Bank, vice-president; Mrs. M. Shettler, Kelowna, secretary-treasurer; these with E. Britton, Kelowna, A. W. Nesbitt, Summerland, constitute the Board of Directors.

C. C. Heighway was elected delegate to attend the meeting of the British Columbia Honey Producers' Association in May.

The total crop of the district was reported at a million pounds with 80 per cent produced in the interior. Inspectors have been appointed in the Kootenays and Prince George, which will give W. Turnbull, Acting Provincial Apiarist, more time to spend in the Okanagan district.

Package Bees & Queens

	Queens	2-Lbs.	3-Lbs.	4-Lbs.
1 to 5 -----	\$1.25	\$4.00	\$5.00	\$6.00
6 to 24 -----	1.20	3.85	4.75	5.85
25 up -----	1.10	3.75	4.50	5.75

For a bigger and better season, get our line bred Italians noted for their hardiness, vigorousness and prolificness.

Terms: 20% deposit, balance at shipping date.

B. J. BORDELON APIARIES
MOREAUVILLE, LA.

Increase Honey Production with...

Soy Flour (Pollen Supplement) and Pollen Traps

Our feeding tests in 1945 proved to us the value of feeding pollen supplement. Colonies at the start were of equal strength of those not helped, but produced an average of 75 comb honey sections more than the ones not receiving the supplement. We prefer to use natural pollen with soy flour, and advise each beekeeper to trap his own pollen.

Plan your supplementary feeding program now. We are distributors of Staley's Lo-Fat High Protein expeller processed flour for beekeepers. Packed in 5, 10, 25, 50, and 100 pound sizes.



With the improved 10 frame Killion pollen trap you can be assured of sufficient pollen so important in developing over-wintered colonies in time for the honey flow. Sturdy construction. Full instructions.

The coupon below will bring you an interesting folder on bee feeding and prices on pollen traps and Soy Flour. Mail it today.

KILLION & SONS APIARIES
PARIS, ILLINOIS

Send coupon
today

Killion & Sons Apiaries
Paris, Illinois

Please send me, without cost, complete information covering the use of Soy Flour and pollen traps in bee feeding.

Name _____
Address _____
City _____ State _____

Dadant's Surplus Foundation *A Standard of Perfection*

This foundation gives each section a delicate center that blends perfectly with every bite. Remember, a well pleased customer is an asset.

SOLD BY ALL LEWIS-DADANT DEALERS
Dadant & Sons :: Hamilton, Ill.

Highest Prime Quality Three-Banded Improved Strain Package Bees & Queens

Backed by over 25 years careful selecting, breeding and shipping to all points in U. S. A. and Canada with 100% perfect satisfaction guaranteed to every one, in every respect.

THANKS for orders booked for April, we have all orders booked at this time for April we desire to accept until we know more about weather conditions in April, we have most any date you desire for May delivery and appreciate your orders large or small.

Book your orders now to reserve your specified shipping date. No customer will be disappointed when booking their orders with us. Your bees are guaranteed on time, our prices for 1946 are as follows—one-fourth down payment with order, balance due 10-days before your specified shipping date.

	Queens	2-Lb. Pkg. with Queen	3-Lb. Pkg. with Queen
1-24	\$1.25	\$4.00	\$5.00
25-99	1.15	3.75	4.75
100 up	1.05	3.50	4.50

We guarantee full weight packages, young vigorous bees with their working life ahead, no supersedure in our queens, health certificate with each shipment, 100% perfect satisfaction guaranteed in every respect. For "HIGHEST PRIME QUALITY", PROMPT SHIPMENT we feel free to say we are surpassed by none. Book your orders now for your requirements if possible. We are working each day now to fulfill your requirements for 1946, where orders are placed in advance enables us to know what shipments must go out each day in shipping season. THANK YOU.

H. A. Farmer Apiaries, Cottonwood, Ala.

TELEGRAPH AND EXPRESS OFFICE DOTHAN, ALA.



Pollen Substitutes

Now is the time to start feeding Pollen Substitutes

Large numbers of progressive beekeepers are feeding their bees pollen substitutes. Beekeepers report that bees dive into this like a hog dives into a slop bucket. Each colony will probably consume a maximum of five pounds of the dry substitute during the normal Spring.

ANIMAL BREWERS YEAST		SOY POWDER		0.5 Gram Sulfathiazole Tablets For use in bee feed and water only	
1 pound	\$.35	5 pounds	\$.75	1 to 24, each	\$.05
5 pounds	1.25	25 pounds	2.50	25	.50
25 pounds	4.50	100 pounds	7.00	100	1.50

POLLEN TRAYS—Pollen trays sold only in lots of 10 or more. \$.05 each. Weight 3½ pounds per 10.

WRITE FOR OUR NEW CIRCULAR

We have published a new circular giving formulas for mixing this dry and for making it into thin cakes and how to feed. Also directions on the use of the new SULFA drug. Write today.

Continue to use our 1942 catalog on everything except bees and queens

THE WALTER T. KELLEY COMPANY : Paducah, Ky.



1946-ITALIAN PACKAGE BEES — QUEENS-1946

QUEENS—LIGHT ITALIANS We Solicit the Queen Trade from Large Queen Users
All Over the Nation

We were never out of queens in 1945, in spite of the unusually heavy demands. Place your order where you can rely on getting your queens when you want them.

WRITE FOR OUR SPECIAL PRICES ON LARGE ORDERS, as well as our folder which shows what others think of the quality of our queens, and packages and our dependable service.

2-lb. with queen \$4.00. 3-lb. with queen \$5.00. Extra queens, each \$1.25

OVERBEY APIARIES : Bunkie, Louisiana

Phone Bunkie, La., 657, Day or Night

WE are increasing our output of queens each year and as soon as material is available we hope to turn out queens in sufficient numbers to supply our customers. In the meantime be patient.

JAY SMITH.



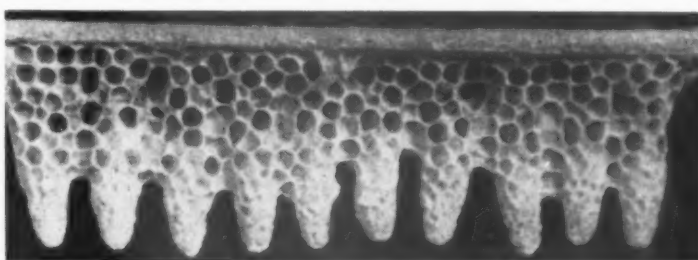
I certainly am happy to be back in civilian life and in the near future Dad and I expect to go places in rearing queens—queens you will be proud to own. So here are greetings to the readers of the good old A. B. J.

HUBER F. SMITH.

CELLS like these produce queens that have the "umph." Yes, they have what it takes to fill the hive with brood and get a bumper crop. All of our cells are like those produced by the bees when swarming and none can excell such cells.

All of our queens are reared direct from the egg without grafting. We have received many letters like the following:

"Please send me another of those reliable Jay Smith & Son queens. I am weeding out all the other queens I have bought. They lay about 60 days and then are superseded. You seem to have something the other breeders lack. I may come there to see what it is."—G. C. Sitton, North Carolina.



IT costs more to rear queens as we do but it costs less to produce honey by those using them. Last year we had to turn down ten times as much business as we accepted and will be compelled to turn down many orders

this season. However, to those anxious to get our queens we recommend placing your orders as far in advance as possible. We cannot guarantee filling orders by return mail. Prices for 1946: Un-tested queens, any number \$1.50 each. Our finest Breeding Queens in large cage with one-half pound of bees shipped by parcel post, Prepaid \$10.00 each.

To those unfamiliar to us we give the following references, First National Bank, Lee County Bank and First Federal Loan Association, all of Fort Myers, Address:

JAY SMITH & SON, Route 2, Fort Myers, Florida

RED STICK APIARIES & CO.

PACKAGE BEES AND QUEENS

Twenty-Five Years as Commercial
Queen Breeders.
Oldest Combless Package Bee
Shippers in Louisiana.

OPEN FOR 1946 BOOKING ITALIAN STOCK— RESISTANT STOCK YOUR CHOICE

Quantity	Queens	2-Lb.	3-Lb.
1 to 24	\$1.25	\$4.00	\$5.00
25 to 99	1.15	3.75	4.80
100 or over	1.05	3.50	4.50

Contract your orders early.

Net with order for United States
or Canada

Red Stick Apiaries & Co.

Main Office, 125 Lessard St.,
DONALDSONVILLE, LOUISIANA
Telegraph, Western Union

The Handy Hive Hoist

Will lift 5 or 6 full
depth supers at once
and hold them out of
your way while you
work the brood nest,
and replace them
easily and safely.
Write for pamphlet.



Tuttle Mfg. Co.

BARABOO, WIS.
Patent Applied For

ANDERSON'S Quality Queens and Package Bees

	Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1 to 24	\$1.25	\$4.00	\$5.10	\$6.20	\$7.30
25 to 99	1.15	3.75	4.80	5.85	6.90
100 up	1.05	3.50	4.50	5.50	6.50

B. A. ANDERSON & CO.

OPP, ALABAMA

ROOT QUALITY BEE SUPPLIES

GLASS AND TIN CONTAINERS
HONEY AND BEESWAX WANTED

M. J. BECK CO.

Successor to M. H. HUNT & SON
510 N. Cedar St., Lansing, Mich.

FOR SALE

BRIGHT YELLOW AND THREE
BAND QUEENS

GRAYDON BROS.

RT. 2 GREENVILLE, ALA.

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GOLDEN QUEENS \$1.25 each. The Lambert
Apiaries, Frankville, North Carolina.

CAUCASIAN and CARNIOLAN package bees
for shipment after May 15th. 2-lb. pkg.
\$4.00; 3-lb. pkg. \$5.00. Tillery Brothers,
Greenville, Alabama.

BETTER BRED Italian queens, seventy-five
cents each any number, after June 1st.
Walter D. Leverette, Ft. Pierce, Florida.

FOR SALE—Standard three pound packages
certified Italians, \$4.40 net f. o. b. after
May fifteenth. A. V. Dowling, Valdosta,
Georgia.

BREWER'S LINE-BRED CAUCASIAN
QUEENS—Breeding stock selected from
1,000 field tested colonies for honey pro-
duction and gentleness. Mated in nuclei
containing 5 standard deep frames. Now book-
ing orders for June delivery at \$1.00 each,
AIR MAIL postpaid. Live delivery guar-
anteed. Inspection certificate furnished.
Terms: 25% with order, balance 10-days be-
fore shipping. Brewer Brothers Apiaries,
3217 Hawthorne Rd., Tampa 6, Florida.

ITALIAN QUEENS selected for winter hardi-
ness, production, non-swarming and resis-
tance to A. F. B., \$1.25 each. Air mail extra.
Ready June 15. R. E. Newell and Son,
Holliston, Massachusetts.

DARK ITALIAN, one-frame brood. 2-lb.
bees and queen clipped if wanted. \$5.00
each in units of three, Lewis A. Wilson,
Blountstown, Florida.

250 two, three or four frame nucs at Edin-
burg, Texas, apiaries for March or later de-
livery. DUSEK-JACKSON, Cameron, Texas.

THREE BANDED ITALIAN bees and queens.
Package bees, 2 lb. with queen, \$4.00;
3-lb. with queen, \$5.00 each. Select untested
queens, 1 to 25, \$1.25; 25 to 100, \$1.15; 100
up, \$1.05 each. Alamance Bee Company,
Geo. E. Curtis, Mgr., Graham, N. C.

EARLY BEES AND QUEENS, March and
April delivery. Queens \$1.25 each. Three
lb. package bees and queen \$5.00. Best
Italian stock. John M. Brose, Capitola, Calif.

PACKAGE BEES—Italian queens. Circular
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GREEN'S profit-producing queens will please
you as they have pleased hundreds of
others. Famous the country over. Where
could you do better? Price \$1.00 each. D. P.
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PACKAGE BEES, QUEENS, Italians. Cir-
cular free. Crenshaw County Apiaries,
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WANTER—Light extracted honey, clover
preferred, in 60's. J. Jones, 115 West 82
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WANTED—Extracted clover honey in 60's.
B. I. Evans, Windom, Minnesota.

WANTED at highest ceiling prices—
1,000,000 lbs. of amber honey, 1,000,000
lbs. of light, 10,000 cases of 24-16 oz. at
\$5.04. Cash paid. No amount too small. We
pay the freight. Honey-moon Products Co.,
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HONEY WANTED—Highest prices paid. We
replace your cans with new tins. Write to
us. O'Donnell & Co., 4840 Drexel Blvd.,
Chicago 16, Illinois.

CLOVER HONEY WANTED in 60's. Large
or small lots. Send sample and state quan-
tity. Ellsworth A. Meineke, Arlington
Heights, Illinois.

HONEY WANTED—All grades, carloads or
less. Also beeswax. Pay top prices. H. & S.
Honey & Wax Company, Inc., 265-267
Greenwich St., New York 7, N. Y.

WE PAY CEILING PRICES for wax, and
remit the day the wax is received. Your
wax made into medium brood foundation at
12 c per lb. The Hawley Honey Co., Iola,
Kansas.

HONEY AND BEESWAX. HIGHEST PRICES
PAID. MAIL SAMPLES, ADVISE QUAN-
TITY. BRYANT AND COOKINHAM, LOS
ANGELES, CALIFORNIA.

HONEY WANTED—All grades and varieties.
Highest cash prices paid. Mail samples.
State quantity. HAMILTON & COMPANY,
1360 Produce Street, Los Angeles, California.

WANTED—Extracted honey, white or light
amber, in 60's. Ed. Heldt, 1004 W.
Washington St., Bloomington, Illinois.

HONEY WANTED—Small or large lots. Send
sample and amount. Rocke Apiaries, Eureka,
Illinois.

CASH FOR YOUR WAX the day received.
Write for quotations and shipping tags.
Walter T. Kelley Co., Paducah, Kentucky.

ALL GRADES extracted honey wanted. Bee
supplies and honey containers for sale.
Prairie View Honey Co., 12243 12th Street,
Detroit, Michigan.

SUPPLIES

Two "Dadant Style" uncapping cans, made of
heavy gauge metal to withstand hard
knocks, ten dollars (\$10.00) each. One
"Brand Junior" capping melter, used very
little, fifteen dollars (\$15.00). One horse
power steel boiler, like new. Equipped with
gas burner. Forty-five dollars (\$45.00).
J. W. Garhart, Spearfish, South Dakota.

BEE SUPPLIES—May we quote you. Simeon
B. Beller, Intercourse, Pennsylvania.

NEW WAX RENDERING DEVICE—Quick,
simple, easy to operate. Fits standard size
lard can. Ideal for cappings, capping melter,
slumgum, etc. Last indefinitely. Satisfaction
guaranteed. Price \$4.00. J. M. Gates, Rt. 5,
Clinton, Missouri.

YOUR WAX WORKED into quality medium
brood foundation for 16c pound; 100
pounds \$12.00. Medium brood foundation
for sale at 70c per pound. Fred Peterson,
Alden, Iowa.

ATTENTION BEEKEEPERS IN MINNE-
SOTA, Wisconsin, Iowa, N. D. and S. D.
Buy Lewis-Dadant Bee Supplies and Honey
Containers in Minneapolis and save. Send
for price lists. TOP PRICES PAID FOR
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A new combined CONTROLLABLE FEEDER
AND SWARM CONTROL. Useful also as
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feeder. Sample with directions, postpaid
\$1.95; 5 (not assembled nor prepaid) for
\$8.00 NICOLLET COUNTY NURSERY, St.
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INSTANT SEVEN AND NINE FRAME
SPACERS. Fast—Accurate. Pat combs,
easy uncapping. Set does all supers. \$1.50
postpaid. SPECIFY SIZE. George Leys, 48
Drake Avenue, New Rochelle 2, New York.

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labor savers. R & E. C. Porter, Lewis-
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HIVE BODIES, covers and bottom boards, bee shipping cages and nuclei hives. All supplies new and knocked down. Price list furnished on request. A & B Supply Company, Coffee Springs, Alabama.

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

LARGE CASH SAVINGS can be made by letting us work your wax into either wired or plain foundation. Large independent factory manufacturing a complete line of bee supplies including extractors, etc. Selling direct saves you the agent's profit. Quick shipment from large stock. Large free catalogue explains everything. Walter T. Kelley Co., Paducah, Kentucky.

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500 first class 10-frame wire and wood excluders at 34c; 250 zinc at 30c. John L. Tidswell, 2711 No. 63 St., Omaha, Nebr.

FOR SALE—100 eight-frame standard hives of bees, 2 supers of combs each. Caucasian stock, guaranteed no disease. Also 100 eight-frame hives of bees with deep combs (2 in. deeper), 2 supers standard combs each. \$10 per hive. Bees must be moved. Sell all or part. Several hundred eight-frame empty supers, very good condition, 50c each. Nealey Honey Co., Aberdeen, Idaho.

FOR SALE—40 10-frame hives of bees. Contact H. G. Frymier, Carbon Cliff, Ill.

60-lb. honey cans mostly used once. 4 cans in wooden crate 75c. 2 cans in wooden case 50c. 1 can in used carton 20c. J. Wolosevich, 6315 So. Damen Ave., Chicago 36, Illinois.

FOR SALE—100 Jumbo hives complete with frames, cypress bottoms and metal covers; 400 special depth supers for above with frames; 25 two-story 10-frame hive complete. All equipment completely sterilized. J. R. Light, Minburn, Iowa.

FOR SALE—50 comb honey supers 4 1/4 x 1 3/4. Andrew Christensen, New Hartford, Iowa.

SUPERIOR Cappings Dryer, three 90-gallon honey tanks, and other supplies. Joseph H. Peterson, 595 S. 3rd E., Brigham, Utah.

4,000 eight-frame shallow extracting supers, with seven drawn combs each. All in excellent condition. Write W. A. Strong, Jr., 335 No. San Gabriel Blvd., San Gabriel, Calif.

3,000 pounds clean yellow beeswax. Theodore Sires, 3916 Main St., Yakima, Washington.

100 or more colonies bees in one or two story hives. No disease. Clyde Cobb, Belleville, Arkansas.

20 acres unimproved land but drained and irrigable, adjoining small lake in Volusia County, at Flatwoods, Florida. For citrus fruit, drug plants, spice, apiary, tobacco industry can't be beat. Old age. Write Stephen Pavloff, Rt. 1, Box 205, Washougal, Washington.

WILL SELL 1000 colonies or lease to party in good territory, or you can work for me for wages or package bees. Max Mayer, 525 Cucamonga Ave., Pomona, California.

BEEKEEPERS' HOIST—\$25.00, f.o.b.—Frt. prepaid in U. S. A. on two hoists to same address. Turner Mfg. Co., Corning, Iowa.

WANTED

WANTED—Copper-burned, scorched, strong refuse honey, light or dark, any condition. What have you in 60-lb. cans? Natural Foods Institute, 624 Prospect Ave., Cleveland, Ohio.

WANTED TO BUY—One 4, 6 or 8 frame electric powered extractor. Write R. M. Pederson, Box 2072, Warren, Arizona.

WANTED—Twenty, thirty frame Radial extractor. W. Elges, Griswold, Iowa.

WANTED—New or slightly used Woodman Radial 30 frame extractor. Obert Knutson, Harmony, Minnesota.

WANTED—PARTNER in my bee business. Good location. Edwin Underwood, Fairview, Montana.

WANTED—Bee outfit with locations, etc. Buy—lease—share. Write the old reliable bee-man, G. Ohmert, Dubuque, Iowa.

WANTED to hear from owner of farm for sale for spring delivery. Wm. Holly, Baldwin, Wisconsin.

POSITIONS AND HELP WANTED

WANTED—Position in apiculture. Experienced in all phases in Midwest, South and Pacific Coast since 1935. Veteran. M. C. West, Davis, California.

I would like to get in touch with parties who are looking for apiary work for years to come. L. L. Ness, Morris, Illinois.

EXPERIENCED BEEMAN would like to lease bees for coming season, preferably Montana or Wyoming. John Osgood, Jacksonville, Oregon.

RECENTLY DISCHARGED middle-aged service man wishes to secure work as helper with commercial honey producer where experience in all phases of apiculture can be had. If you can use a strong, energetic, intelligent man with little experience but anxious and quick to learn, write, stating your offer, to: Box 10, American Bee Journal, Hamilton, Illinois.

WANTED—Man to help in honey production. Season April 1 to January 1. State age, habits, experience and salary expected. Board, room furnished or house furnished. Homer Godwin, Emison, Indiana.

WANTED—Experienced helper for year round work. One half year in Texas, balance of season in Minnesota. No drinkers considered. Give age, experience and references. Write Box 60, American Bee Journal.

WANTED—Another queen breeder and helper at once. No boozers. Jensen Apiaries, Macon, Mississippi.

WANTED—Several men, either with experience or not, to work in our apiaries and assist with packing of our crop. State qualifications and wages expected. Schultz Honey Farms, Ripon, Wisconsin.

WANTED—Experienced helpers for queen yards, package bee yards and general bee work. Only honest reliable men considered. No boozers. Give full information, age, experience, reference and salary expected in first letter. York Bee Company, Jesup, Georgia.

APIARY INSPECTORS needed by the Michigan Department of Agriculture—salary and expenses. Inquire—Michigan Civil Service Commission, 300 North Grand Avenue, Lansing 4, Michigan.

WANTED—Young man for Minnesota apiaries. Give experience, age and wages expected. E. E. Salge, Weslaco, Texas.

SEEDS AND TREES

"Randolph Brown," new everbearing strawberry. Do you want to pick delicious strawberries all summer and fall, starting 60 days after planting? Then you want the "Randolph Brown." It's a marvel, unsurpassed. Extra choice plants, 25 for \$3.00; 50 for \$5.50; 100 for \$10.25. Postpaid in U. S. A. R. B. Berry Farm Rt. 11, Box 620, Fresno, California.

SEEDS OF HONEY PLANTS—Send for circular describing forty varieties. White Dutch clover \$1.10 pound; Ladino clover \$2.50 pound; Lespedeza bicolor \$1.50 pound; Anise-hyssop \$2.00 ounce postpaid. Special—one packet each fifteen desirable honey plants \$2.00 postpaid. Pellett Gardens, Atlantic, Iowa.

TRIFOLIUM AMBIGUUM or Pellett Clover, the new clover that spreads from the root. While the supply lasts, 100 root divisions \$5.00 postpaid. Minimum order 100. No seed available. Melvin Pellett, Atlantic, Iowa.

BY EXPRESS COLLECT—American Basswood trees 4-5 ft. \$1.00; 5-6 ft. \$1.75; 6-8 ft. \$2.25; 8-10 ft. \$3.00; 3-4 ft. \$.50 ea.

European Basswood 3-4 ft. \$1.50 each. French Pussy Willow (pollen) 4-5 ft. 90c; 3-4 ft. 60c. Red Barked Dogwood 18-24 inch per 50 \$11.00. Pink Tartarian Honeysuckle 12-18 inch per 50 \$8.50; 2-3 ft. per 50 \$15.00; 18-24 inch per 50 \$11.00; or Caragana Arborescens (Siberian Pea Tree) same price. BY MAIL PREPAID—5 American Basswood 12-18 inch or 4 18-24 inch for \$1.20; 2 3-4 ft. \$1.20; 1 4-5 ft. \$1.25. 5 Pink Tartarian Honeysuckle 12-18 inch, or 4 18-24 inch, or 3 2-3 ft. for \$1.20; or Caragana Arborescens (Siberian Pea Tree) for same price. 2 Pussy Willow 2-3 ft. \$1.20; 1 3-4 ft. 90c; 1 4-5 ft. \$1.20. 3 Red Barked Dogwood 18-24 inch \$1.20. 3 Zabelli Honeysuckle (true red) 12-18 inch \$1.20. 3 Chinese Vitex (Chaste tree) 8 inch \$1.20; 50c each or \$1.20 for any 3 of the 2 year old field grown plants as follows: Butterfly weed (asclepias tuberosa), Fall asters, Dragonhead, Echinops rito, Sea Lavender, Persian Catnip, Improved Catnip, Salvia pratensis, Mordens Loosestrife, and Purple Loosestrife. Southern orders are shipped this month. Checks require 10c bank exchange. The above in our best pollen and nectar producers. Write for descriptive circulars. NICOLLET COUNTY NURSERY, St. Peter, Minn.

FOR SALE—Sainfoin seed. Over 10 lbs., 55c per lb. Less, 75c per lb., not postpaid. Perennial legume, soil builder, hay crop and honey plant. R. W. Brimhall, Pleasant Grove, Utah.

MISCELLANEOUS

OLD A.B.J.'s WANTED—We have calls from foreign libraries whose subscriptions were interrupted during the war, for extra copies of the full year 1942 and 1943 of American Bee Journal. To anyone sending in the full set of 12 numbers of either of these years, we will be glad to mark up their subscription one year to the American Bee Journal, Address American Bee Journal, Hamilton, Ill.

ATTENTION Midwestern and Canadian beekeepers—Californian wants to exchange information and bee locations. Box 26, Care of American Bee Journal.

DRY SKIM MILK 35 cents a pound; 5 lbs. \$1.25. Brewer's yeast 40 cents a pound; 5 lbs. \$1.50. Soy flour expeller, 10 lbs. \$1.40. F. O. B. Bainbridge, N. Y. Write for prices in larger units. M. Y. S. Company, Bainbridge, New York.

SOY FLOUR for pollen substitute. "Special X" Soy Flour (Expeller Method) 5 pounds \$1.00; 10 pounds, \$1.75, postpaid. 25c additional west of Rocky Mountains. Remit with order. Spencer Kellogg & Sons, Inc., Decatur 80, Illinois.

INDIAN BEE JOURNAL—Official organ of the All India Beekeepers' Association. Yearly subscription price \$1.50 a year (7s 6d) by international money order. Address INDIAN BEE JOURNAL, Ramgarh, Dist. Naini Tal, U. P. India.

EARTHWORM CULTURE—Send postcard for valuable FREE bulletin, with review on "Intensive Propagation and Use of Earthworms in Soil-building." Thos J. Barrett, Earthmaster Farms, Box 488-H, Roscoe, California.

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information on range sheep than any magazine published. Subscription \$1.50. Hotel Cactus, San Angelo, Texas.

DIFFERENT, that's all. Written and published for the instruction of beekeepers, contains breezy entertaining beekeeping comment each month. One year, \$1.00; two years, \$1.50. Sample 3 cents stamp. Beekeepers Item, San Antonio, Texas.

THE BEE WORLD—The leading bee journal in Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy, post free, 12 cents, stamps. Membership of the Club, including subscription to the paper 10/6. The Apis Club, The Way's End, Foxton, England.



Seeds of New Honey Plants

FIFTEEN PACKETS

\$2.00

A mixed collection of all those new honey plants you have been reading about. Each packet with directions for growing, type of plant, and all you need to make a honey plant garden for yourself in your own yard. Get your supply early before the limited amounts available are gone.

Melvin Pellett
Atlantic, Iowa

Italian Package Bees and Queens

2-lb. package with queen.....\$4.00
3-lb. package with queen.....5.00
Queens, each.....1.25
Add 25c per package for orders of less than 50 packages.

JOHN S. SHACKELFORD
LIVE OAK, CALIFORNIA

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At prevailing prices.

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UVALDE, TEXAS

BOOKING ORDERS FOR 1946

for our bright Three-Banded Italian Queens and Package Bees. Prices:

	Queens	2-Lb.	3-Lb.	4-Lb.	5-Lb.
1-24,	\$1.25	\$4.00	\$5.10	\$6.20	\$7.30
25-99,	1.15	3.75	4.80	5.85	6.90
100 up,	1.05	3.50	4.50	5.50	6.50

We ask 10% deposit with orders booked in advance. We guarantee safe arrival, satisfaction.

TAYLOR APIARIES : Box 249, Luverne, Ala.

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Timely topics on western Canadian beekeeping and all the news about Canada and Canadian markets. You cannot afford to be without the most up-to-date information in these days of great changes. Sample copy free. Address **WESTERN CANADA BEEKEEPER**, Wallingford Building, Winnipeg, Manitoba, Canada.

Caucasian Queens and Packages for 1946

D. T. WINSLETT

1015 Sonoma Ave.
NO. SACRAMENTO 15, CALIFORNIA

Crop and Market Report

Compiled by M. G. Dadant

For our March Crop and Market Report, we asked reporters to answer the following questions:

1. How has the weather been for bees?
2. Moisture conditions?
3. Has shortage of beehive material been sufficient to endanger usual increase plans?
4. In general, are prospects as good as last year?

Weather

Generally the weather has been perhaps a little colder than usual in the south central areas, with a prolonged cold spell along the northern border, and much colder than usual in California. Otherwise, the weather has not been out of the ordinary and there have been occasional flights for the bees. Canada reports a long cold spell but no extremely severe weather, so that conditions are probably approximating normal in most sections of the country except California where the bees and vegetation have both been retarded.

Moisture

In about all the eastern, south-eastern and central areas, the moisture has been sufficient and in many places, considerably more than a year ago. We find reports of dry conditions in eastern Colorado, western Kansas and Nebraska, and extending up through Wyoming and into Montana where much more rain is needed. It is likely also that the snow in the mountains is yet insufficient or at least not as heavy as it should be.

California, likewise, together with its cold weather, is reporting that much more moisture is needed, particularly in the southern and south central areas, whereas the northern and north central areas apparently have had at least normal or a little more than normal in the amount of moisture.

The snows have been quite satisfactory in the north central areas, although falling after the ground was frozen so that the run-off probably is considerably heavier than it might have otherwise been. In Canada, the snows are quite satisfactory, and the moisture conditions in eastern Canada also are much better than a year ago.

Beehive Material

Practically everybody reports beehive material is short. The old experienced beekeepers in many instances were able to salvage their material or had enough on hand so that it is not going to prevent the refilling of all empty equipment, although it may cut down some on proposed increase. There is very little possibility that the amount of increase recommended by the government, which averages 8 per cent and runs as high as 25 per cent in some states, like Iowa, will be approached this year unless lumber conditions improve and it is now getting late for that.

There is also little doubt but that beginners and returning veterans are having an extremely hard time in getting anything like the amount of equipment that they might want.

In Canada, conditions do not seem to be quite so severe and apparently beekeepers are getting about what they need in the way of lumber.

Prospects Compared to 1945

In the southeast areas particularly, prospects are far ahead of what they were in 1945. We must remember that 1945 was a short crop throughout this entire area, so it is no more than to be expected that there will be an "evening up."

Throughout the northeastern and central western areas, apparently prospects are as good as last year, or perhaps much better. They are better undoubtedly in the way of sweet clover available. The question is, of course, whether the Dutch white clover plants which apparently are fairly abundant will come through and

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Cars and less than cars
Top Prices

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HONEY WANTED Carloads or Less HIGHEST PRICES PAID

LEWIS A. KONCES CO.
NORTH ABINGTON, MASS.

make the production that they did in 1945. That is questionable.

Naturally where the moisture is short in the intermountain territory, prospects are light, but the crop was also light in 1945 so that perhaps there is no reason to expect a less crop than in the season just past. While Idaho does not report ideal prospects, it is likely that conditions are somewhat better than they were in 1945. Even California, which had a severe disappointment in 1945, is likely to equal the 1945 crop unless conditions deteriorate instead of improve as the 1946 season advances.

In the eastern Canadian provinces, undoubtedly prospects are better than they were a year ago, and this applies also to Michigan where the crop was short and where moisture and plant conditions, as well as colony conditions, do look much better than they did a year ago.

Western Canada, undoubtedly, will be the equal, if not better than last year from conditions as they now appear.

Prominent Illinois Beekeeper Dies

We regret to announce to our subscribers, the death of C. J. Anderson at Morris, Illinois. Mr. Anderson grew up with the sweet clover bloom in Grundy County, Illinois and kept considerable number of colonies of bees for many years. He was particularly interested in the development of his county association and took great interest in national affairs.

One Can or a Carload—What have you? Mail your offerings to us.—Prompt action. Cash on delivery.
JEWETT & SHERMAN CO.
Lisbon Rd. & Ervine Ave. 1204 W 12th St.
Cleveland, 4, Ohio Kansas, city Mo.

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AND QUEENS

BUTTE CITY AND AUBURN

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MARCH, 1946

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Daughters of Queens
bred for Resistance

Bred to Italian
Drones

All three races bred in separate yards.

2-lb. pkg. bees with queen\$4.00 Extra queens \$1.25 each. Over 25 years
3-lb. pkg. bees with queen 5.00 a shipper in U. S. A. and Canada.

Sulfathiazole used in feed at no extra cost to you. MASTER MIX POLLEN made from soybean flour, cottonseed meal, brewers yeast, skim milk, natural pollen, invert sugar and Sulfathiazole, 10-lb. pail \$2.50; six pails \$13.50. Send for FREE Circulars.

Blue Bonnet Apiaries, R. 2, Box 23, Weslaco, Texas

SOYBEAN FLOUR

EXPELLER PROCESS

For use in supplementing natural pollen for spring buildup

5 pound package, postpaid east of Rockies\$1.00
5 pound package, postpaid west of Rockies 1.25
100 pound bag, f.o.b. mill, Decatur 5.90
500 pounds or more, f.o.b. mill, Decatur, per hundred 5.65
2000 pounds or more, f.o.b. mill, Decatur, per hundred 5.40
Carload, f.o.b. mill Decatur, per hundred 5.15

Cash with order, C.O.D. Instructions for mixing with all orders.

SHELLABARGER SOYBEAN MILLS, Decatur 30, Ill.

ITALIAN PACKAGE BEES AND QUEENS

On the same old Basis—QUALITY, SERVICE, SATISFACTION

2-lb. bees with queen\$4.00
3-lb. bees with queen 5.00
4-lb. bees with queen 5.90

Queenless packages deduct \$1.00. Write for prices on comb packages.

E. J. BORDELON APIARIES : Box 33, Moreauville, La.

MARCH QUEENS

While we have a large volume of MARCH queens booked, we suggest that you write us if you need queens during this month. The following prices are effective until further notice.

Quantity	Queens	2-Lb. Pkg.	3-Lb. Pkg.
1-24	\$1.25	\$4.00	\$5.10
25-99	1.15	3.75	4.80
100 up	1.00	3.50	4.50

Bessonet Bee Company : Donaldsonville, La.

ITALIAN BEES AND QUEENS

We are prepared to book your orders for package bees and queens for April and May shipments. We have and always give what we advertise.

	Queens	2-lb. pkg.	3-lb. pkg.
1-24	\$1.25	\$4.00	\$5.00
25-99	1.15	3.75	4.75
100-up	1.00	3.50	4.50

Quality package bees and queens and shipments made on time is what we offer you. Live delivery guaranteed.

LUCEDALE APIARIES : Lucedale, Miss.

IMPERIAL

ITALIANS AND CAUCASIANS for the season

2-lb. package with queen, each\$4.25
3-lb. package with queen, each 5.25
Untested queens, each 1.25

THE COFFEY APIARIES
WHITSETT, TEXAS

Practical Queen Rearing
By FRANK C. PELLETT

Describes many methods of queen rearing with their reasons. For the amateur, practical beekeeper, or professional queen rearer. Approved methods carefully explained. POSTPAID \$1.00.

American Bee Journal
HAMILTON, ILLINOIS

● THRIFTY QUEENS ●

Combless Packages and Queens
THREE-BANDED ITALIANS ONLY
Write for 1946 prices and open dates

W. J. FOREHAND & SONS
FORT DEPOSIT, ALABAMA
Breeders Since 1892

Now Booking 1946 Packages

2-lb. package with queen \$3.75
3-lb. package with queen 4.75
Queenless package, deduct 1.00

"DIXIE'S BEST" (ITALIANS)
TANNER BEE CO. : Laurel, Miss.



Carpenter's Electric Embedder

U. S. Pat. 2,383,708


"Better Bee-Havior"

TRADE MARK

Embeds all four wires at once
evenly; handles crimp-wired
foundation. SO

Get on the beam. Don't
your wires.

It will save you wax and labor.

Be
horizontal _____ or 

and have better Bee-Bavior.

Terms, \$7.50 Cash, f. o. b. Riverside.
Dealers very satisfactory discounts.
Shipping wt. approximately 5½ lbs.

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4266 Homewood Court
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Caucasian Package Bees For 1946

CHAS. HESS

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THE BEEKEEPERS MAGAZINE

Spicy—Up-to-date—Practical
Send postal card today for free copy
and special introductory offer.

Rt. 5, Box 181
LANSING, MICH.

The Postscript

Jay Smith raises my blood pressure by writing about a holiday fishing trip out to sea. His grandson hooked an eight-foot shark and Jay a 95-pound sea bass. The biggest catch for the day weighed 120 pounds. I once went deep sea fishing off the coast of Florida and caught one fish which looked big to me although it did not weight more than five pounds. If Jay doesn't stop writing about the big fish and the many tropical fruits and abundance of flowers, he is likely to get very tired of having me around when I finally do get down to investigate all the wonders that he describes.

Incidentally Smith says that the best fumigant for wax moth is the common fly spray. It is deadly to insects but safe and inexpensive. When he loses a colony of bees he puts a spoonful of spray inside, closes the hive and quickly every worm dies.

Lee C. Worth, of Van Buren, Missouri, reports that in 1915, '16 and '17 a number of farmers in New Madrid County planted a considerable acreage of sunflowers for the seed crop. He harvested a nice crop of section comb honey from this source in 1916 and 1917. The honey was golden yellow, of heavy body and granulated readily. Both odor and flavor were of pronounced sunflower reminder but customers liked the taste and bought the honey readily. Although there are many reports of honey from wild sunflowers, a crop from the large flowered cultivated variety is unusual. From the behavior of the bees on sunflowers in the test garden I had concluded that this variety yields only pollen. Other observations on this point will be very welcome.

One of Iowa's most famous farms has been sold to L. D. Taylor, our most extensive honey producer. As far back as I can remember the Westrope farm and Westrope short-horn cattle in Shelby County have been well known. The farm of 480 acres is located near Harlan and according to the Des Moines Register

was sold to Mr. Taylor at a price of about \$170 per acre or a total of \$81,900.00. The real estate dealer who sold the farm reported it as the largest deal in his thirty years' experience. At last honey production has become big business. No longer is the beekeeper regarded as a trifle or a hobbyist. If you happen to be driving through Harlan stop and see the Taylor honey house. It was the honey that passed through the extractors there that paid for the farm.

Elmer Carrol, Route 5, Lansing, Michigan, is making an album of honey labels and wants to include every possible label even though the only difference from that of others is the name of the beekeeper. Carroll is a swell chap who is doing a good job with his little magazine, and we hope readers of this page will send him samples of their labels.

This business of writing for publication is like speaking over the radio in that one has no indication of how many are interested in what he says. The carpenter who builds a house can see what he has done but the writer has little evidence of the value of his work.

After more than forty years of contributing to the magazines, ranging all the way from the old Green's Fruit Grower and Southern Fruit Grower to Nature Magazine, Country Gentleman, Women's Home Companion and Ladies Home Journal, I am wondering just what has been accomplished. With an average of something like one article each week the total is probably above 2,000. How many more I don't know but perhaps it might have been better to spend more time with the bees.

Among the most attractive flowers in the test garden is a bed of tickseed-sunflower in some places called "Burmargold." The seed was sent to us by E. W. Knauf, of Philadelphia, in the winter of 1939-40. The plants first came into bloom on August 25, 1940, and have bloomed very freely each season since. The plant apparently is an annual but reseeds so freely that the bed is fully occupied

each year. It shows little tendency to spread so offers no problem as a weed. It reaches a height of about six feet and is a mass of yellow flowers for about ten days or two weeks. Although it is reported as a very good source of honey in the East, the bees pay little attention to it here. At times they do work it freely in rainy weather for a short period.

An Indian remedy for bee stings is to mash the leaves of sassafras and apply to the affected part as a poultice. It is said that the tannic acid in the leaves is a beneficial application for stings. If you live where sassafras is common, try this remedy and report results.

J. T. Wallace, of Columbus, Kans., writes that there is a good location for a beeman in southeast Kansas. Large areas of land have been thrown open by coal mining and once seeded to sweet clover should remain undisturbed. By scattering seed where the newly exposed subsoil has not already been occupied by weeds the clover has a favorable chance to start. Strip mining leaves the land in such condition as to be of little use otherwise.

Wm. A. Kyburz, of Cali, Columbia, lives in a land of perpetual spring. The maximum temperature is about 80 degrees and the minimum at about 58. That sounds like a fairyland here where the temperature sometimes drops as much as fifty or sixty degrees within twenty-four hours. He lives at an altitude of 5,000 feet and all the honey is gathered from wild plants with the exception of that gathered from coffee. Many trees bloom twice a year. June and October give a reddish honey from coffee; January and July a beautiful honey from a tree called arayan. There are numerous flows which overlap throughout the year. If it were not so hard to get there I would like a chance to pay a visit to that region.

Henry Holt, of Manchester, New Hampshire, has had anise-hyssop in the flower garden for three years and reports that the bees do not visit the flowers there. It would be interesting to know how conditions differ in his garden from others in the Northeast where the bees have shown so great an attraction. Holt reports that the plants grew well and blossomed freely. He also reports having cleome for several years with but few bee visitors.

FRANK C. PELLETT.

MARCH, 1946

Middle Tennessee Apiaries : Leather Colored Italian Queens

From imported breeding stock. 1-25, \$1.25 each. 26 or more \$1.10 each. One-fourth books orders—balance before shipping. Add 5 cents for all queens by air mail.

ALL QUEENS AFTER JUNE 15TH \$1.00 EACH

J. B. TATE & SON

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Good honey comes from good bees and good flowers. Good sales come from good-looking, easy to pack, easy to label Hazel-Atlas Honey Jars.



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Gaspard's Quality Italian Queens and Package Bees

We are now booking orders for the Spring of 1946. Only 20% with order balance at shipping time. Prices as follows:

2-lb. package with queens.....	\$3.50
3-lb. package with queens.....	4.50
4-lb. package with queens.....	5.50
5-lb. package with queens.....	6.50

Comb packages with one frame of brood and honey, add \$1.50 per package.

J. H. GASPARD : Hessmer, Louisiana

Three-Band Italian Package Bees

Full weight, prompt shipment. Young bees, state health certificate with each shipment. Live arrival guaranteed. Replacement or refund made promptly upon receipt of bad order from your express agent.

Our prices until June 10, 1946, each with queens, in U. S. funds.

Lots of	Queens	2-lb.	3-lb.	4-lb.	5-lb.
1 to 29	\$1.10	\$4.00	\$5.10	\$6.20	\$7.30
30 or more		3.50	4.50	5.50	6.50

For queenless packages deduct \$1.10 each from above prices. If queens are wanted introduced add \$1.10 to the price of each package.

JACKSON APIARIES
FUNSTON, GA.

For the Best Results

in producing a maximum crop this season, replace winter loss, fill all available equipment and boost wintered over colonies with

PACKAGE BEES

Our supplies are on hand and labor is available to give you the service you desire and expect.

Packages are of top quality bees and queens that produce extra honey that gives you a higher percentage of profit.

2-lb. with queen	\$3.50
3-lb. with queen	4.50

Satisfaction guaranteed.

Rossman & Long
Box 133 : Moultrie, Ga.

PACKAGE BEES

HEADED BY OUR FAMOUS QUEENS STRAIN

3-BAND ITALIANS

	Queens	2-Lb. Pkg.	3-Lb. Pkg.
1-24	\$1.25	\$4.00	\$5.10
25-99	1.15	3.75	4.80
100 up	1.05	3.50	4.50

Send us your queen orders. Apiaries accredited and certified by the Alabama Department of Agriculture.

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SHIPPING DATES

O. K. ANDERSON & SON
COFFEE SPRINGS, ALABAMA

Bees & Queens

All breeders, Northern record producers. Our system of holding queens in large nuclei until egg laying ability is proved assures you of the finest queens to be had at any price.

2-lb. pkg. with queen	\$4.00
3-lb. pkg. with queen	5.00
4-lb. pkg. with queen	6.10
Extra queens	1.25

10% discount on orders of 25 or more queens or more packages with queens.

For queenless packages deduct price of queen.

10% deposit with order, balance 15 days before shipping date.

The Rich Honey Farms
Jeanerette, La.

1896 50 1946

Years' Experience

Our Golden Anniversary

The year 1946 marks the 50th year of continued service in the manufacture of beekeepers supplies.

With this wealth of knowledge and experience we feel we are in better position than ever to give our customers that valued quality and service that has meant so much to them in the past 50 years.

In order to assure yourself of that continued service we suggest you order early this year. Although we have an ample supply of HONEY SECTIONS, HIVE BODIES, SUPERS AND FRAMES at present, from all indications the year 1946 will make even greater demands on the industry.

Write for our SPECIAL PRICE on number two (2) beeway sections ($4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$); also ask for our new 1946 price list of supplies now on hand and available to our customers.

MARSHFIELD MFG. CO.
MARSHFIELD, WISCONSIN

Root Service from Chicago

**BETTER BEEKEEPING
LARGER PRODUCTION**

Beekeeping is a business, important, ever growing, full of promise. As certain as the need of foods throughout the world, will be the want of honey for sweets and the need of bees for pollination.

The production of honey and beeswax can be greatly increased. The best in knowledge, methods, bees and equipment will do it. We will help with the best in books and literature and needed supplies as much as possible. You may help yourself by ordering the things you will need early this year.

Will you let us plan now to take care of your need of supplies.

**WE WANT HONEY AND BEESWAX IN
TRADE FOR SUPPLIES**

A. I. Root Co. of Chicago
224 West Huron Street
CHICAGO, ILL.

Jensen's Package Bees and Queens

Some open and partially open dates in May. If you have not succeeded in getting booking, write or wire us. Our greatly increased queen production is enabling us to accept package and queen orders—over and above our earlier anticipation.

Prices

	Queens	2-lb. Pkg. with Queens	3-lb. Pkg. with Queens
1-24	\$1.25	\$4.00	\$5.10
25-99	1.15	3.75	4.80
100 up	1.05	3.50	4.50

JENSEN'S APIARIES MACON, MISS.

Home of "Magnolia State" strain Italians

Booked Up

until June 1st on Package
Bees and Queens

After that date we will have plenty of good queens and may be able to handle a few late package orders. Weather conditions here have been very unfavorable this winter but what happens from now on will determine the bee season. We hope it will be extra good for you.

PRICES AFTER MAY 20TH

Lots of	Queens	2-lb.	3-lb.	4-lb.	5-lb.
1-24	\$1.10	\$3.85	\$4.95	\$6.05	\$7.15
25-99	1.00	3.60	4.65	5.70	6.75
100-up	.90	3.35	4.35	5.35	6.35

For Queenless Packages Deduct Price of Queen
Payable in U. S. Funds

The Stover Apiaries
Mayhew, Mississippi

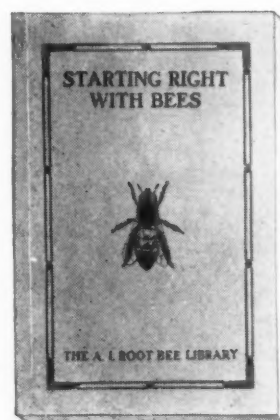
Next time

your neighbor beekeeper asks:—

Yes, the next time your neighbor beekeeper comes over to your place and asks what is wrong with his bees that they don't produce better results, or on how to properly handle a swarm, or what to do with the bees in the Spring to get them ready for the honeyflow, JUST SHOW HIM THIS ADVERTISEMENT—

—he will thank you

Here is a book that will save beekeepers time and money. It was written by the editors of "Gleanings in Bee Culture" to answer the everyday questions arising from handling bees. The very simple instructions are easily understood by the beginner. Every step in taking care of bees from the time the three-pound package arrives at the express office until the colony is packed for winter is described. Numerous illustrations help the beginner to get a correct idea of what to do.



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98 PAGES 184 ILLUSTRATIONS

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